# QUANTITATIVE CONJUGATE IMAGING OF IODINE-123 AND TECHNETIUM-99m LABELED BRAIN AGENTS IN THE BASAL GANGLIA

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**QUANTITATIVE CONJUGATE IMAGING OF IODINE-123 AND TECHNETIUM-99m LABELED BRAIN AGENTS IN THE BASAL GANGLIA**

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This body of work is dedicated to my grandmother, Luella F. Foster,
whom instilled in me the importance of education.

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## SUMMARY

In the research reported in this dissertation, the concept of classic conjugate imaging, a non-tomographic nuclear medicine technique, is modified such that activity of a radiopharmaceutical distribution in the striata can be estimated. A mathematical model is developed that extended the application of classic conjugate imaging to estimation of two distinct and aligned activity distributions. Error analysis of the mathematical model is performed to characterize the accuracy of the model and to benchmark the limitations of the model. Phantom experiments are performed to demonstrate the practical application of the model and to evaluate its' accuracy. A Monte Carlo simulation model of conjugate imaging of activity uptake in the striata of a primate is developed to evaluate the accuracy of the modified conjugate imaging technique as applied in the use of a dedicate conjugate imaging system. In addition, the simulation model is used to determine and characterize the shielding design of the small field of view gamma cameras comprising the dedicated conjugate imaging system. The application of scatter correction is investigated to address the downscatter of high-energy photon emissions into the photopeak window and the inclusion of scattered primary photons in the photopeak window.

In this dissertation, it is shown that the modified conjugate imaging technique developed can be used to estimate accurately activity uptake in each of two distinct and aligned activity distributions. The accuracy of the technique was shown to be comparable to that of clinical quantitative SPECT. The modified conjugate imaging technique used

with the dedicated conjugate imaging system may, therefore, be a viable quantitative nuclear medicine technique for activity estimation of radiopharmaceutical uptake in the striata of Parkinsonian and schizophrenic patients. The portability and low cost relative to SPECT systems make the dedicated conjugate imaging system advantageous for clinics with Parkinsonian and schizophrenic patients, who are unable to travel due to physical or mental limitation.

# Chapter 1

## INTRODUCTION

Parkinsonism is a term for progressive neurodegenerative disorders, which describes a variety of movement disorders pathologically characterized by the degeneration of dopaminergic neurons in the striatal dopaminergic system. Schizophrenia is a chronic neuropsychiatric disorder associated with the hyper-production of striatal dopamine. During the last two decades nuclear medicine has been in the forefront of investigations of dopamine loss characteristic of Parkinsonism and dopamine hyper-production associated with schizophrenia. The striata, part of the basal ganglia, a collection of nuclei located deep in the cerebrum, are greatly responsible for controlling movements and maintaining postures by producing and transmitting dopamine. Studies have suggested that nuclear medicine imaging can play a vital role in the clinical management of Parkinsonism and schizophrenia, specifically in the initial diagnosis, intermittent follow-ups, and drug efficacy investigations for clinical management of these diseases.

The primary goal of the research presented in this dissertation is the development and characterization of conjugate imaging of two aligned activity distributions. The pursuit of this research is motivated by the study and evaluation of activity uptake in the striata of individuals with Parkinsonian or schizophrenic symptoms. Of particular interest is the influence of radiopharmaceuticals. Most of the radiopharmaceuticals

presently available for striatal imaging are labeled with iodine-123 ($^{123}$I) and technetium-99m ($^{99m}$Tc). Differences in biodistribution and emission spectrums should be addressed to ensure accurate assessment of activity uptake in the striata.

There are two main objectives for this study. The first objective is the development and assessment of a model describing conjugate imaging to the estimation of activities in each of two aligned sources. The second objective is the evaluation of the modified conjugate imaging technique as it applies to the estimation of activity uptake in the striata of a primate using a dedicated conjugate imaging system. Six specific tasks are completed to achieve the objectives. The first three tasks are related to the first main objective. The last three tasks are related to the second main objective.

In task one, a mathematical model that extends the application of classic conjugate imaging to include the estimation of activity above background in each of two aligned source distributions is developed. In task two, error analysis of the model is performed. In task three, phantom experiments are performed to evaluate the accuracy of the mathematical model and to demonstrate the practical applicability of the technique.

Tasks four, five, and six utilize a Monte Carlo simulation model developed to simulate conjugate imaging of activity uptake in the striata of a primate using a dedicated conjugate imaging system. The Monte Carlo simulation model was developed using the Monte Carlo radiation transport code MCNP-4C. In task four, the Monte Carlo simulation model is used to design and characterize the shielding design of two small field of view (FOV) gamma cameras comprising the dedicated conjugate imaging system. In task five, the Monte Carlo simulation model is used to asses the accuracy of the estimations of activity uptake in the striata using the modified conjugate imaging

technique and dedicated conjugate imaging system. In task six, scatter correction is investigated. The application of the triple energy window (TEW) scatter correction technique to data generated from the Monte Carlo simulations using $^{123}$I and $^{99m}$Tc radiopharmaceuticals is assessed.

This dissertation has eight chapters. Chapter 2 provides background relevant to this research. The work and results of this research are presented in Chapters 3-7. Chapter 8 summarizes the research and provides suggestions for future work.

# Chapter 2

## BACKGROUND

During the last two decades, nuclear medicine has been used in investigations at the forefront of research of the abnormal dopamine function characteristic of Parkinsonian syndromes and schizophrenia (Booij, Tissingh et al. 1999). In these investigations the dopaminergic system in the striata is assessed in vivo through qualitative and semi-quantitative analyses. Qualitative imaging techniques have limitations, as radiopharmaceutical uptake assessment is based mainly on human eye discernment and physician experience. Quantitative nuclear medicine techniques rely less on the physician's eye and more on the comparison of numerical values representing radiopharmaceutical uptake. Quantitative studies often result in more accurate assessment of disease development and drug therapy treatment. However, quantitative studies performed to date have focused on the relative activity ratio between the left and right striatum. The modified conjugate imaging technique introduced in this dissertation determines absolute activity estimates, in addition to relative activity estimates. The modified conjugate imaging technique is a single-photon emission technique that utilizes the geometry of the striata to estimate activity uptake in the striata.

This chapter reviews the background topics relevant to the techniques adopted in this dissertation. The subjects include single-photon emission imaging with specific

focus on classic conjugate imaging, striatal dopamine, Parkinsonism and Schizophrenia, and finally conjugate imaging of striata.

## 2.1 Single-photon Emission Imaging

This section provides a brief discussion on single-photon emission nuclear medicine including a description of standard techniques and equipment. The focus is single-photon emission imaging, qualitative and quantitative. An understanding of single-photon emission imaging provides a foundation for understanding conjugate imaging. While planar emission imaging is the backbone of this work, single-photon emission computed tomography (SPECT) is also presented, as it is a standard nuclear medicine technique used in brain imaging, the primary clinical application relevant to this dissertation. Measurements from the modified conjugate imaging technique are compared to measurements from quantitative SPECT studies.

Single-photon emission imaging is the form of nuclear medicine imaging that uses single photon emitting radiopharmaceuticals. There are two primary forms of single-photon emission imaging, planar single-photon emission imaging and SPECT. Planar single-photon emission imaging generates two-dimensional (2-D) projections (images) of a distribution of a radiopharmaceutical. SPECT generates three-dimensional (3-D) volume representations of a radiopharmaceutical distribution. Such 3-D volumes are generated through tomographic reconstruction of 2-D projections acquired from multiple angular positions about a body being imaged. Single-photon emission imaging uses gamma cameras to detect the photon emissions.

This section first discusses three aspects of single-photon emission image generation: photon interactions, radiopharmaceuticals, and gamma cameras. It then describes the difference between qualitative and quantitative images, and the mathematical basis of qualitative and quantitative planar and SPECT imaging. The section concludes with a brief discussion of the task of quantitative assessment of striata via the single-photon emission technique of conjugate imaging.

### 2.1.1 Photon Interactions

Single-photon emission imaging exploits photon interactions in matter to generate in vivo images of the body and its physiological functions. The energy of photons used to generate single-photon emission images range from 80 keV to 800 keV. These photons interact in matter primarily through photoelectric absorption and Compton scattering. The probability of each interaction occurring is dependent on the energy of photons and the material it is transversing.

#### *2.1.1.1 Photoelectric Absorption*

In photoelectric absorption, an incident photon is absorbed by an atom. The energy of the photon is transferred to an inner shell electron, and the electron is ejected from the atom with kinetic energy equal to the incident photon energy minus the binding energy of the electron. Figure 2.1 is a sketch of the photoelectric process. Photoelectric absorption is a dominant process for low energy photons with energy 100 keV and below. The cross section of photoelectric absorption is proportional to $Z^3/h\nu^3$ where $h\nu$ is the photon energy. Consequently, the probability that a photoelectric interaction will occur

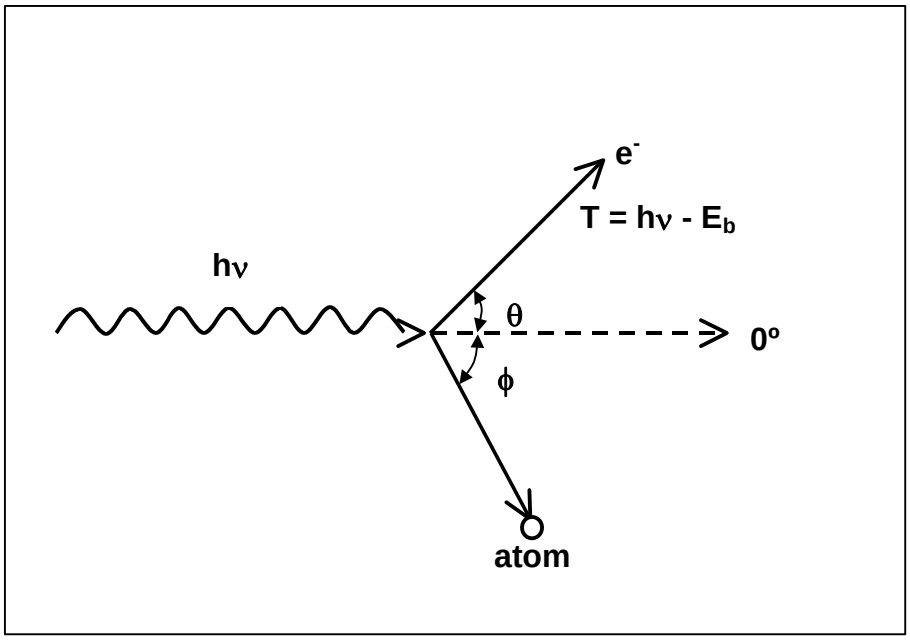


Figure 2.1. Photoelectric absorption. An incident photon of energy hν is absorbed by the atom and an inner shell electron is ejected. The electron is ejected at angle θ and has energy T, which is equal to the energy of the incident photon minus the electron's binding energy.

increases significantly in materials with high atomic numbers and decreases with an increase in photon energy.

*2.1.1.2* *Compton Scattering*

In Compton scattering, an incident photon collides with a loosely bound electron. The photon scatters off the electron at angle φ transferring some of its energy to the electron. The electron is scattered at angle θ with kinetic energy equal to the energy difference between the incident photon and the scattered photon. Figure 2.2 is a sketch of the Compton scatter process.

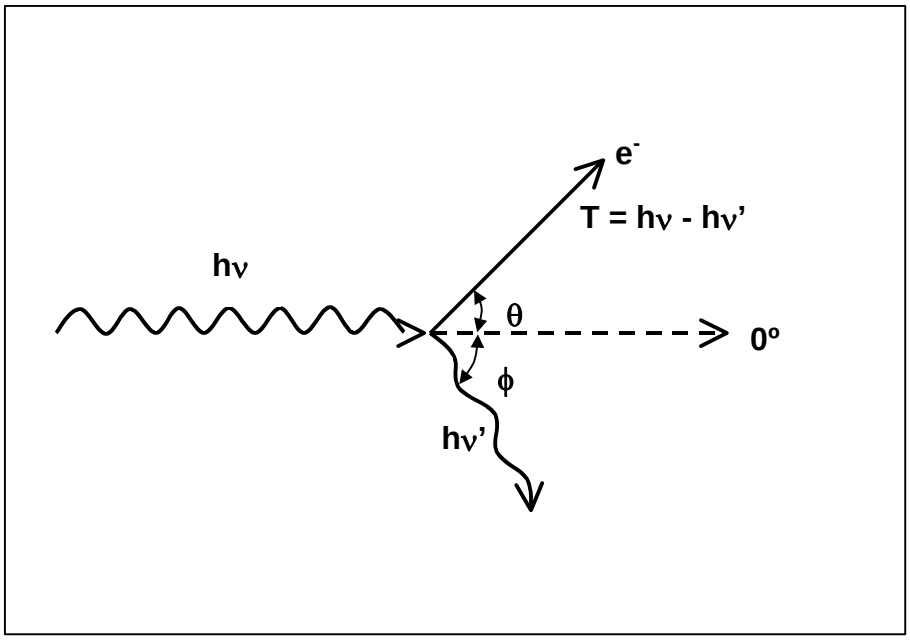



Figure 2.2. Compton scattering. An incident photon scatters off a loosely bound electron. The scattered photon scatters off at angle ϕ with energy of hν'. The electron is ejected at angle θ and has energy T, which is equal to the difference between the energy of the incident photon hν and the energy of the scattered photon hν'.

The energy of the scattered photon is expressed as

$$h\upsilon' = \frac{h\upsilon}{1+\left(\frac{h\upsilon}{m_o c^2}\right)(1-\cos\varphi)}, \qquad (2.1)$$

where *hν'* is the energy of the scattered photon; *hν* is the energy of the incident photon; $m_o c^2$ is the rest mass of an electron; and $\phi$ is the scattering angle of the scattered photon.

The kinetic energy of the scattered electron is

$$T = h\upsilon - h\upsilon'. \qquad (2.2)$$

Compton scattering is the dominant form of interaction for photons with energy ranging from about 100 keV to about 10 MeV making Compton scattering the dominant form of interaction in single-photon emission imaging.

### 2.1.2 Radiopharmaceuticals

Radiopharmaceuticals are pharmaceutical agents labeled with radioisotopes. They are designed to accumulate in a specific organ or volume of tissue through participation in a physiological function that is specific to that organ or volume of tissue. In this manner, a radiopharmaceutical transports a radioisotope to the target organ or volume. The radiopharmaceuticals used in imaging the striata participate in the process of neurotransmission of dopamine.

Radiopharmaceuticals suitable for routine clinical single-photon imaging have several basic properties in common. The production of single-photon emission radiopharmaceutical is relatively inexpensive. The chemical combination of the pharmaceutical agent and the radioisotope does not change the chemical reactivity of the pharmaceutical agent as regards to its participation in a designated physiological function. In other words, the radiopharmaceutical participates in the function of interest without disrupting that function. A suitable clinical pharmaceutical has a high affinity for the target volume, and conversely, a low affinity for non-target organs or tissue, especially non-target organs in close proximity to the target volume. Affinity refers to the degree to which the radiopharmaceutical binds to the target. In addition to having high affinity for a target, the radiopharmaceutical has a low dissociation rate. The dissociation rate is the rate at which the radiopharmaceutical unbinds from the target site. Before

imaging can take place, the kinetics of the radiopharmaceutical must reach equilibrium. A pharmaceutical with a low dissociation rate remains bound to the target site long enough for equilibrium to be reached and the imaging study completed. Thus, it is important that the rate of dissociation be relatively small. In addition, the effective half-life of the radioisotope must be long enough to allow the completion of an imaging procedure and short enough to keep the radiation dose to the patient low.

Once the radiopharmaceutical is administered, photons emitted from the radiopharmaceutical travel through the body. Many interact in the body through photoelectric absorption and Compton scattering. Some photons that exit the body, unscattered or scattered, are detected by a gamma camera. This detection is the first step in the image generation process.

### 2.1.3 Gamma Camera

#### *2.1.3.1 Components*

The gamma camera, also called the Anger Camera after its inventor, Hal Anger, is the most commonly used device in nuclear medicine (Anger 1958). The gamma camera consists of a collimator, scintillation crystal, lightguide, photomultiplier tubes (PMTs), preamplifiers, amplifiers, positioning circuitry, and pulse-height analyzers (PHAs). Figure 2.3 is an illustration of a gamma camera system, which includes a computer for image formation and display. The components of the gamma camera are encased in housing made of materials with high atomic numbers, for example lead or tungsten. This housing shields the camera from ambient radiation. The collimator is an array of holes cast in a material with a high atomic number Z and high-density $\rho$, similar to the

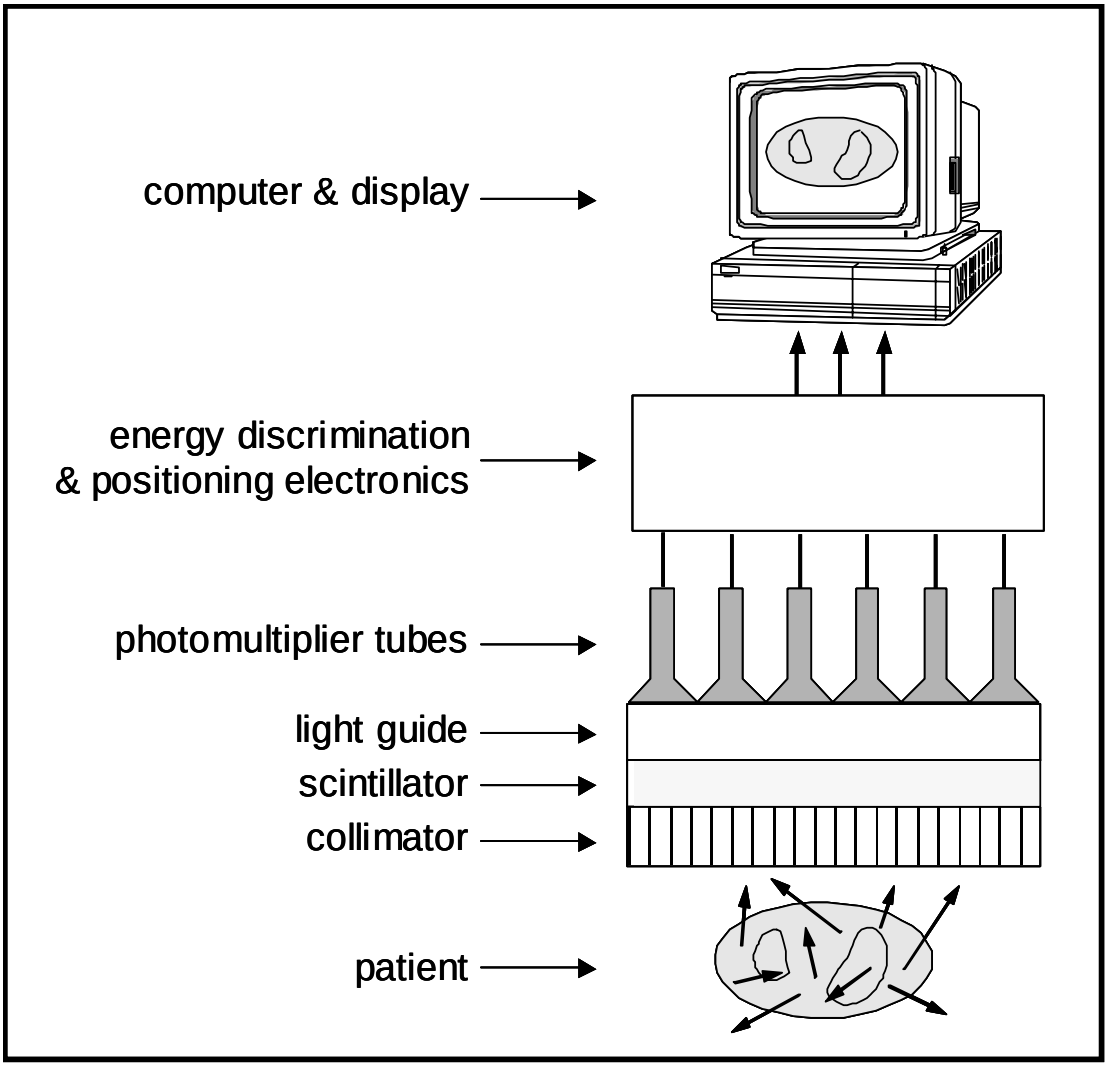



Figure 2.3. Basic components of a gamma camera system. The photon emitted from the radioactivity distribution within the patient enters the gamma camera through the collimator. The photons interact in the scintillation crystal, which results in the emission of light photons. These light photons enter PMTs through the light guide. The PMTs convert light signal into an electric signal. The energy discrimination and positioning electronics use the electric signal to determine energy and position to generate images. The images are displayed on the computer. Figure courtesy of Larry Zeng, Ph.D., at the University of Utah. (Zeng 2003)

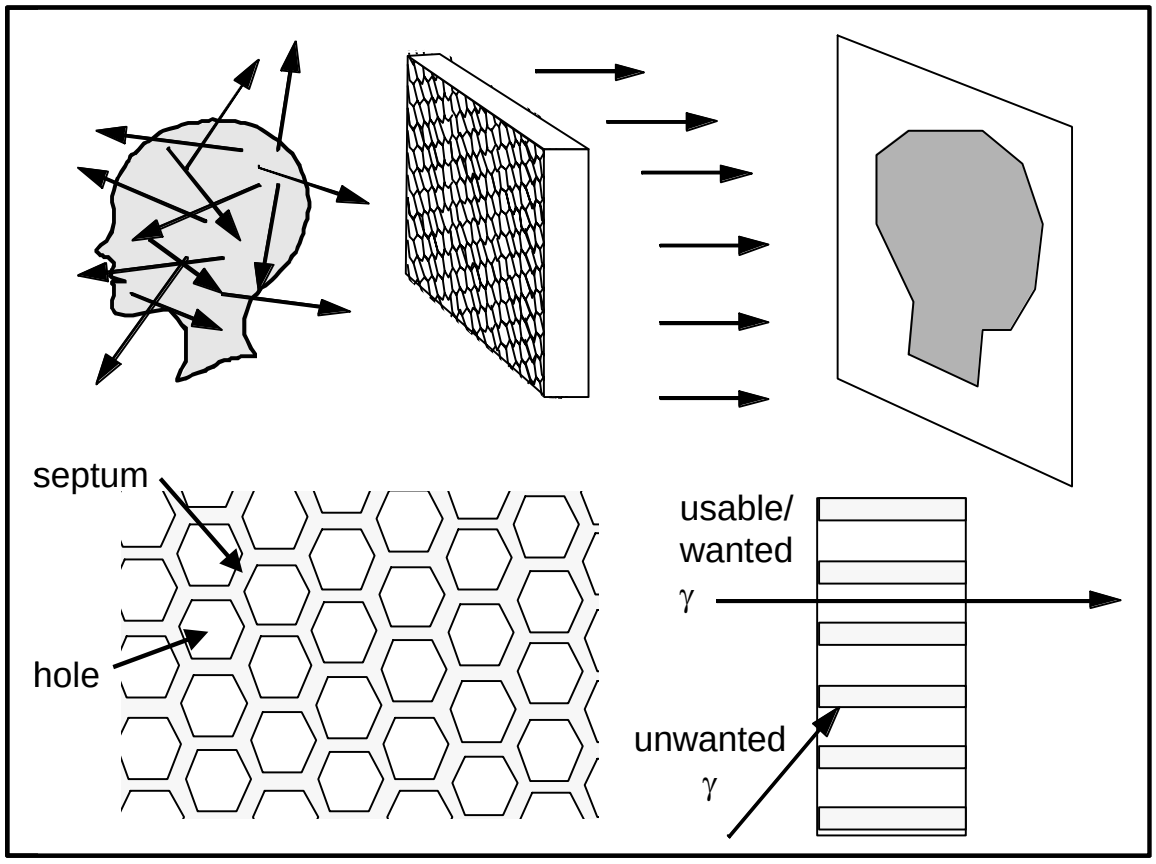



Figure 2.4. Collimators and cross section of a hexagonal collimator. The septa are made of a high atomic number and high-density material. The cross section resembles a honeycomb. Photons are emitted isotropically from activity distribution within the patient. Not all the photons are used to generate the image. A small percentage of photons that encounter the collimator are used to generate the image. Photons traveling through the collimator are usable. Photons traveling at an angle through the collimator have a high probability of being absorbed in the septa. These photons do not contribute to image formation. Figure courtesy of Larry Zeng, Ph.D., at the University of Utah. (Zeng 2003)

shielding. The walls of the holes are called septa. Alloys of lead are the most common materials used as septa. Figure 2.4 includes an example of a cross section of a parallel-hole collimator with hexagonal-shaped holes. The collimator allows photons traveling in the direction parallel to the collimator holes to pass through to the scintillation crystal and absorbs photons traveling in other directions. Photons passing through the collimator encounter the scintillation crystal. When a photon interacts with the atoms in the crystal, the crystal emits visible light photons approximately proportional to the amount of energy absorbed due to the photon interacting in the crystal. A light guide is an optical coupling compound that aids in the transmission of light photons from the scintillation crystal to the camera's PMTs by minimizing reflection loss. A PMT is a vacuum tube that contains an anode, photocathode, and dynodes. A PMT generates an electric current (output signal) approximately proportional to the number of visible light photons that enter the PMT. The preampliers and amplifiers are electronics used to propagate and amplify PMT output signals prior to digitization, discrimination, and storage. The positioning circuitry estimates, from the output signals of the camera's PMTs, the position of the gamma photon interaction in the crystal. The electronics of the PHA reject detected photons with energies not within a specified range. Data collected from the positioning circuitry and PHA are used to generate images. These images are digitally displayed on computer monitors.

#### *2.1.3.2 Gamma Camera Function*

In a typical single-photon emission study, the radiopharmaceutical is administered to a patient orally or intravenously. The radiopharmaceutical is given time

to localize in the desired organ or volume in the patient. Gamma photons are emitted isotropically from the activity distribution. Many of these photons go undetected, as they never come in contact with the gamma camera. Photons with the potential to be detected are those that enter the gamma camera through its collimator or aperture. The collimator mechanically selects photons for possible detection. Photons that travel through the holes reach the scintillation crystal. Some interact with the crystal; some pass through it. Ideally, photons that impinge on the collimator at an angle are absorbed in the walls of the honeycomb-like structure of the septa. Figure 2.4 includes an illustration of collimation. Collimated photons that interact in the scintillation crystal transfer energy through Compton or photoelectric interactions to electrons in the scintillation crystal. These electrons, in turn, lose their energy by interacting with the crystal atoms through excitation and ionization. The excited atoms return to ground state by emission of visible photons. The number of visible photons emitted is proportional to the amount of energy transferred to the atom indirectly by the incident gamma photon. The light output of the crystal is transferred to the PMTs via the lightguide. A gamma camera usually has several PMTs. The exact number depends on the size of the scintillation crystal and the size of the PMTs. In a typical gamma camera, there are 37 to 93 PMTs in a hexagonal array. The lightguide distributes the light output from photon interactions in the crystal across several PMTs. The photocathode of each PMT converts the visible light photons into electrons. About four to six light photons must strike the photocathode to generate one electron. The electrons produced at the photocathode are then multiplied as they propagate through the dynodes. Dynodes are located along the PMT. Each dynode is held at a higher positive voltage than the previous dynode. When an electron strikes a dynode,

two or four new electrons are generated. These new electrons add to the number of electrons traveling through the tube to the anode. Although each PMT outputs electrons multiplicatively greater in number than the electrons released at its photocathode, the number of electrons needs to be further amplified. A preamplifier, attached to the PMT, enhances the electrical signal so the signal is sufficiently strong that it can pass through a cable to the main amplifier. The amplifier increases the signal by about three orders of magnitude. The positioning circuitry linked to the PMTs determines the position of the energy deposition of a photon in the crystal by summing weighted signals from the PMTs. The amount of light detected from each PMT is in direct relation to the PMT's proximity to the location of the gamma-ray interaction in the scintillation crystal, i.e. the closer the PMT is to the event, the larger the PMT signal. As a result, the PMT signals are weighted in relation to their location to the event. The sum of the PMT output signals, known as the Z pulse, is proportional to the energy of the initial photon interacting in the crystal. The PHA accepts Z pulses within a specified energy range and rejects Z pulses outside the energy range. This range is referred to as an energy window. The detected photons within the photopeak window are the energy-window events used to generate images. The size of the energy window is dependent on the energy resolution of the gamma camera. The poorer the energy resolution, the wider the window. If the Z pulse is within a specified energy range, the Z pulse and the corresponding location are digitized and stored.

Typical nuclear medicine images are stored as n x n image matrices, where each image element is called a pixel. Each pixel corresponds to a small continuous range of (x, y) locations in real object space. The image matrix is similar to a counter; a count is

added to a pixel if the Z pulse occurred within the real object coordinate range represented by the pixel. Nuclear medicine images are usually stored as 64 x 64, 128 x 128, 256 x 256, or 512 x 512 matrices. While the physical image size remains the same; the pixel size varies according to the number of total pixels. The pixels in a 64 x 64 image matrix represent a larger range of spatial points in real object space than the pixels in a 512 x 512 image matrix. As a result, a 512 x 512 image records better spatial resolution, if the device hardware can accurately record such resolution.

#### *2.1.3.3 Gamma Camera Performance*

Not all gamma cameras are designed the same. As a result the performance of gamma cameras varies. The design of a gamma camera is largely dependent on the energy of photons to be imaged. The collimator and scintillation crystal thickness are selected to correspond with the energy of the photon to be imaged. The collimator and the scintillation crystal have great influence on the performance of a gamma camera.

Collimators play a significant role in the performance of gamma cameras as they are the entry point into the gamma camera. While the performance of the gamma camera is influenced by several collimator characteristics, such as hole diameter and bore, septal wall thickness is of interest in this research. The selection of septal wall thickness is also dependent on the energy of the photon to be imaged. Imaging high-energy photons requires thick septal walls to minimize septal penetration – photons permeating the septal walls. Thinner septal walls are acceptable for imaging lower energy photons. However, the selection of an adequate collimator becomes more complicated, if the energy spectrum of the radiopharmaceutical has energy peaks higher than the principle energy

peak used for image generation. This is because higher energy gammas may downscatter into the photopeak of the spectrum. This is the case with $^{123}$I labeled radiopharmaceuticals. In addition to the primary emission photon of 159 keV, 3% of $^{123}$I gamma photons are in the energy range of 248 keV - 784 keV. For $^{123}$I quantitative single-photon emission imaging studies of striatal dopamine neurotransmission, in which spatial resolution is important, a high-resolution collimator is needed. Typically, a low energy high-resolution parallel-hole collimator is used for such studies as imaging focuses on $^{123}$I's primary gamma emission of 159 keV. However, the septal walls of such a collimator are too thin to absorb the energy of the high-energy gamma emissions of $^{123}$I. Thus, septal penetration occurs and the high-energy gamma emissions may interact in the scintillation crystal increasing image noise.

Thickness of the scintillation crystal also influences the performance of a gamma camera, as it is the essential component for detection. A thicker crystal has higher detection efficiency than a thinner one of the same material. More photons are absorbed in a thicker crystal because photons that would have escaped a thinner crystal are now interacting in the crystal. A thicker crystal also decreases the spatial resolution of the gamma camera. Although more photons are absorbed in a thicker crystal, light photons leaving the crystal and entering the PMTs are spread out a larger area. In addition, many photons transfer energy through several Compton scatter events before escaping the crystal or eventually being absorbed by photoelectric interactions at distance from the location of the initial interaction.

### 2.1.4 Attenuation and Scatter

Ideally, images generated from gamma cameras would be a true spatial and quantitative representations of the activity distributed throughout the target volume. However, in practice the images generated from gamma cameras are less-accurate representations due to attenuation and scatter. That is, the grayscale values of images generated from such data do not reflect absolutely the values of radioisotope uptakes in particular volumes of interest.

Primary photons are photons emitted from a source of radioactivity that have not participated in an interaction. Primary photons that are absorbed in the scintillation crystal via the photoelectric effect provide useful spatial information about the activity distribution. Unfortunately, a large number of primary photons do not reach the camera due to Compton scattering or photoelectric absorption in the body. The loss of these photons is called attenuation. However, many photons are scattered in the body and are then detected by the gamma camera. Some photons exiting the body, unscattered or scattered, scatter in the camera before detection. The Z pulses of many of these scattered photons are often below the specified threshold and are therefore rejected by a PHA. Due to the finite energy resolution of the gamma camera, some Z pulses of scattered photons are not rejected. This is problematic because scattered photons are generally located a distance away from the Compton scatter event. The inclusion of scattered photons with approximately 159 keV energy degrades image quality as scattered photons do not provide accurate spatial information of the radiopharmaceutical distribution. In the case of radiopharmaceuticals that emit photons with energies higher that those of the primary photons, contributions from scattered higher-energy photons contaminant data from

primary photons. Such higher-energy photons are energetic enough to penetrate collimator septa and to deposit sufficient energy in the scintillation crystal that they contribute to the image. $^{123}$I is an example of a radioisotope that emits photons with a range of energies above the primary photon emission of 159 keV. $^{123}$I is an integral part of this dissertation and is discussed in more detail in section 2.4.

Image data that lacks data from primary photons due to attenuation and includes scattered photon data are qualitative images. Even though qualitative images do not reflect fully the amount of activity distributed in volumes of interest, they do have clinical value. Qualitative single-photon emission images are a significant component of the management of patients in present nuclear medicine clinics. Although qualitative images can sometimes be sufficiently informative, quantitative images are at times necessary as they provide more definitive information, such as absolute quantities or ratios. For example, a longitudinal study of a disease documented only with sequential qualitative images may require that significant changes in the images exist before clinicians are able to discern any change. Use of only qualitative images proves to be problematic if a disease progresses slowly. Small changes are lost in qualitative images. Quantitative imaging provides a means of recognizing change and of measuring its amount. Quantitative imaging involves compensating for the effects of attenuation and scatter. Parkinsonism is an example of a disease that progresses slowly. Studies have suggested that quantitative imaging can be used to monitor successfully Parkinsonism and related drug therapies (Ichise and Ballinger 1996; Bourguignon, Pauwel et al. 1997; Messa, Volonte et al. 1998; Booij, Tissingh et al. 1999; Benamer, Patterson et al. 2000; Booij, Speelman et al. 2001; Costa 2001; Grosset 2001; Tatsch 2001; Tzen, Chin-Song et

al. 2001; Frey 2002; Pinborg, Videbaek et al. 2002; Poewe and Wenning 2002; Abella 2003; Burn and O'Brien 2003; Catafau 2003; Jersild and Trevino 2003; Leenders 2003; Morrish 2003; Oertel, Gerstner et al. 2003; Piccini 2003; Pirker 2003; Seibyl 2003). Thus, of interest, are quantitative approaches to striatal uptake of relevant radiopharmaceuticals.

### 2.1.5 Qualitative Single-photon Emission Imaging

Single-photon emission imaging, planar or tomographic, is based fundamentally on the attenuated Radon integral. The standard geometry and coordinate systems of patient and gamma camera set-up for single-photon emission imaging are illustrated in figure 2.5. Two coordinate systems, one based on the frame of reference of the patient and the other based on the frame of reference of the gamma camera, are depicted. The patient's frame of reference is specified by the spatial coordinates $\boldsymbol{x} = (x,y,z)$ and is assumed to be stationary. The z coordinate is out of the page. The gamma camera's frame of reference, specified by the spatial coordinates $(x_r, y_r, z)$, rotates about the z-axis with a rotation angle $\phi$. The attenuated Radon integral has the following form:

$$E(x_r, z) = \int_L f(x) e^{-\int_{L'(x)} \mu(x) dy'_r} dy_r \,, \qquad (2.3)$$

where $E(x_r, z)$ is the emission measurement, $f(x)$ is the spatial distribution of the radiopharmaceutical, $\mu(x)$ is the distribution of attenuation coefficients, and $dy_r$ is the differential length along the line $L$ in the $y_r$ direction. Equation 2.3 consists of two

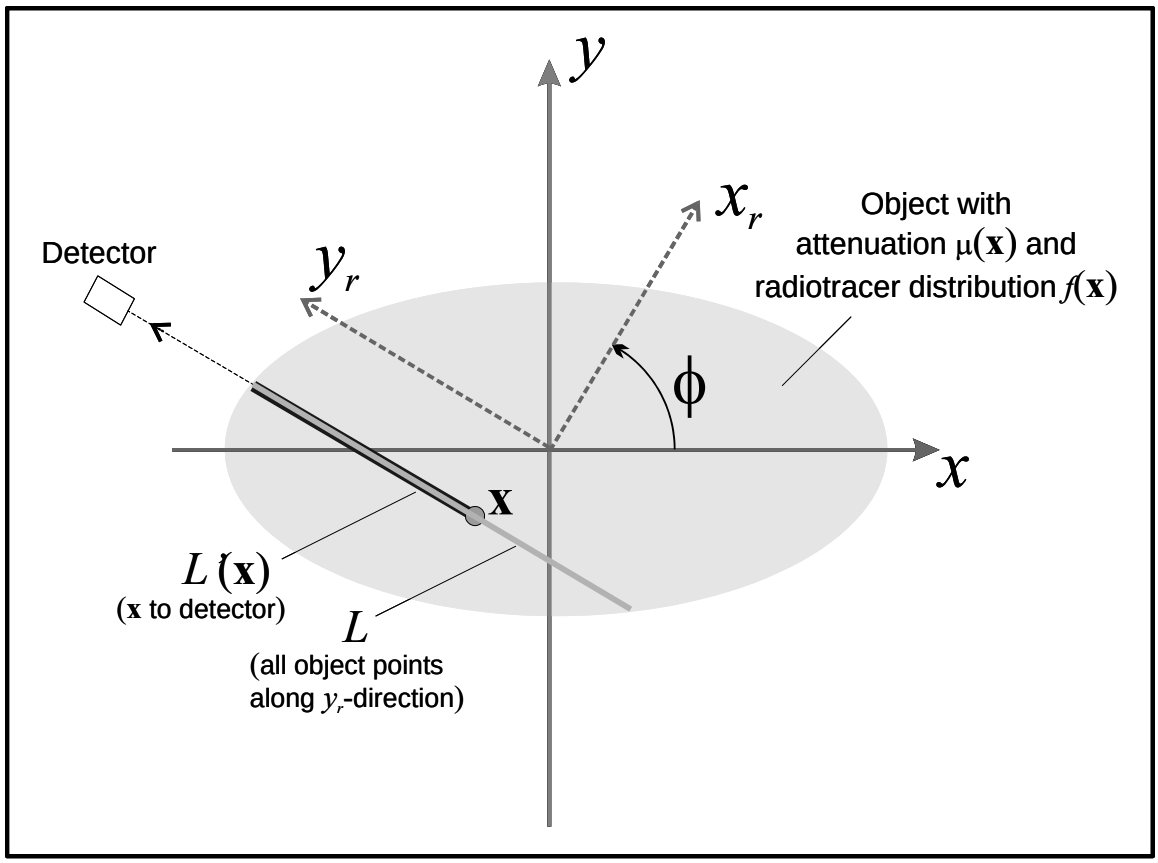



Figure 2.5. Acquisition of emission data. The geometry and coordinate systems of patient and gamma camera set-up used to acquire an emission measurement. The patient is represented by the object. The detector in this illustration is acquiring an emission measurement from point x. The detector detects photons that are attenuated as they pass through the body from x to the detector. μ(x) is the distribution of attenuation coefficients within the object along the line segment L(x). The emission measurement is described by the attenuated Radon integral. The Radon integral sums the product of the radiotracer distribution f(x) and the fraction of transmitted photons from x along L, $e^{-\int_{L(x)} \mu(x) dy_r}$. Figure courtesy of Larry Zeng, Ph.D., at the University of Utah. (Zeng 2003)

integrals. The exponential integral is the summation of the attenuation coefficients along the line segment $L'(\boldsymbol{x})$ as the tissue along $L'(\boldsymbol{x})$ may not be homogenous. The integral of $f(\boldsymbol{x})$ and the exponential term (the attenuation term) are the total radioactivity along the line segment $L(\boldsymbol{x})$ as seen by the gamma camera. Depending on the image study the gamma camera or gamma cameras can be rotated about the $z_r$ axis through angle $\phi$. At each angular location $\phi$ an emission measurement, an attenuated Radon integral, is acquired for each pixel of the image. Each measurement acquired by the camera in a specific angular location is a measurement of radiation traveling in the $y_r$ direction.

### 2.1.6 Planar Emission Imaging

Planar emission imaging is the process by which images of single views of a radiopharmaceutical distribution are generated. An image of a single view of a 3D radiopharmaceutical distribution is called a planar projection. The gamma camera is placed at a fixed angular position $\phi$ and emission data are collected. The emission measurement in each pixel of a planar projection (planar image) is described approximately by the attenuated Radon integral, representing the sum of the activity along the line extending from a point within the distribution to the face of the gamma camera. Due to the integration of the activity along the line, the 3D distribution of the activity in the patient is depicted as a 2D image. One planar projection of the patient comprises the collection of attenuated Radon integrals in the $y_r$ direction.

Clinically, planar emission imaging is used to observe structure and function through static studies and dynamic studies. A static study is the acquisition of a single projection; a dynamic study, in this context, is the collection of a series of planar images

acquired intermittently over a specific time interval. A thyroid study is a common static study used to assess the function of a thyroid. Generally, three planar images are acquired – anterior, left anterior oblique, right anterior oblique. A common dynamic study is a renal study. A renal study is used to evaluate the function of a kidney by observing the kidney extracting the administered radiopharmaceutical from the blood and excreting it to the bladder. Usually, several sequential planar images are required for accurate assessment, as time-activity curves of total activity in the kidney or kidneys are needed.

### 2.1.7 SPECT

Single-photon emission computed tomography is the process of generating, from a collection of planar projections, cross-sectional views of a radioactivity distribution. These views can be combined to form a 3D representation of the distribution. SPECT is a two-step process: 1) image data acquisition and 2) image data reconstruction. The complete process of SPECT requires one or multiple gamma cameras, a means to display images, a gantry for camera rotation about the patient, and software to perform image reconstruction. For step one, a gamma camera or multiple gamma cameras are rotated about the patient (z-axis) through angle $\phi$ to acquire various projection views. The angular range is generally 180 or 360 degrees. The range depends on the organ imaged. Most commercial SPECT systems have two gamma cameras on a rotating gantry. Single and triple gamma camera systems are also available. Figure 2.6 is an illustration of a dual head gamma camera system acquiring projection data from different angles. Once the projections have been collected, the data they contain are manipulated to generate 2D

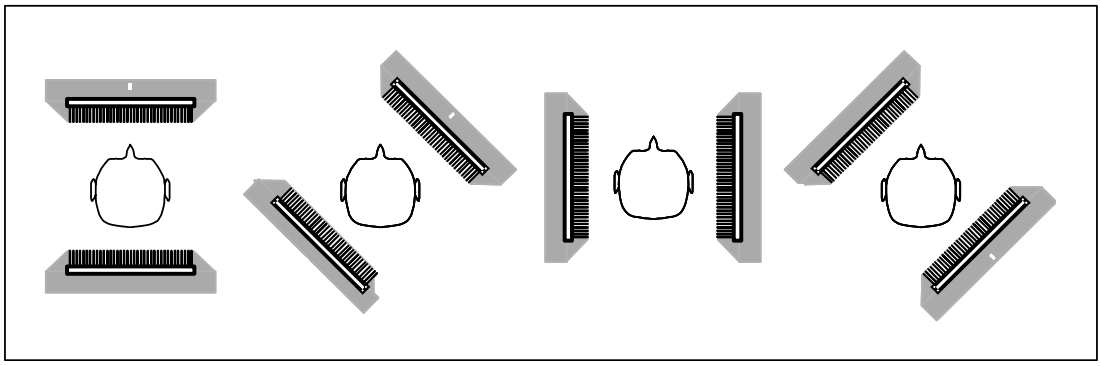


Figure 2.6. SPECT projection acquisition. Dual-head gamma camera system acquiring eight projections at different angles. A projection acquired for each gamma camera. Figure courtesy of Larry Zeng, Ph.D., at the University of Utah. (Zeng 2003)

transaxial cross-sectional images. In addition to transaxial slices, coronal and sagittal slices are often generated for SPECT studies by reslicing the volume of transaxial slices.

The process of generating transaxial slices is called image reconstruction. Image reconstruction is an inverse problem that uses the measured data, the projections, to generate the transaxial slices of the activity distribution. Filtered backprojection is the most common reconstruction method applied in clinical settings (King and Farncombe, 2003; Rosenthal, 1995; Tsui, 1996; Zeng, 2001). Iterative image reconstruction schemes are used in most research labs and their use is becoming more popular for clinical studies (Vandenberghe, D'Asseler et al. 2001; Zeng 2001).

As stated previously, in section 2.2.4, a planar projection is described mathematically as a collection of attenuated Radon integrals. However, the attenuated Radon integral has proved too complex for practical use in clinical image reconstruction. Consequently, the attenuated Radon integral is often replaced with a Radon integral in the reconstruction process. If the attenuation coefficient distribution $\mu(\boldsymbol{x})$ in equation 2.3 is assumed to be zero, then equation 2.3 is the Radon integral of f($\boldsymbol{x}$). That is, equation 2.3 becomes

$$E(x_r, z) = \int_L f(x) dy_r \ , \qquad (2.4)$$

where $f(\mathbf{x})$ is the spatial distribution of the activity and $E(x_r, z)$ is the emission measurement along the single line segment $L$ measured at the single point $(x_r, z)$. Although the reconstruction calculation is less rigorous and less accurate with the use of the Radon integral than with the use of the attenuated Radon integral, the resulting SPECT images are clinically usable representations of the true activity distribution in the body. They are not quantitatively accurate and are sometimes misleading in the clinic setting, but nonetheless they are often diagnostically useful.

SPECT studies are used routinely in nuclear medicine departments. Often times, SPECT studies are performed when planar studies reveal abnormalities that require a better assessment. Bone SPECT studies are examples of studies performed in addition to corresponding planar bone studies. SPECT studies are also performed as primary diagnostic procedures. Such is the case for myocardial perfusion and brain perfusion assessment. Myocardial perfusion SPECT studies are the most common SPECT studies performed. They are used to assess a patient's heart at rest and under stress. Brain perfusion SPECT is performed to identify clinical indications of cerebrovascular disease, dementia, and seizure.

### 2.1.8 Quantitative Single-photon Emission Imaging

Quantitative single-photon emission imaging incorporates correction techniques to estimate and correct for attenuation and scatter. Attenuation correction uses an attenuation map, usually now generated from transmission imaging, to account for counts

lost due to attenuation. Scatter correction estimates the fraction of scattered photons detected and subtracts that fraction from the total number of photons detected.

Transmission imaging generates estimates of attenuation coefficients by using an external source. The external source is placed in such a position that the emissions of the source must pass through the patient to reach the detector. This configuration is illustrated in figure 2.7. The transmission measurement, T ($x_r$, z), at a specific point ($x_r$, z) is described as

$$T(x_r, z) = \int_L \mu(\mathbf{x}) dy_r \ , \qquad (2.5)$$

where $\mu(\mathbf{x})$ is the attenuation coefficient at x. Equation 2.5 is the Radon integral of $\mu(\mathbf{x})$ along the single line L measured at the single point ($x_r$, z). The collection of Radon integrals in the $y_r$ direction is a transmission projection. Transmission tomography uses the collection of transmission projections in all $y_r$ directions for a fixed z to generate a transmission image of a transaxial slice of the body. A single transmission projection is used to correct attenuation in planar imaging studies. Transmission tomography is used to correct attenuation in SPECT studies.

Classic conjugate imaging is a quantitative planar imaging technique that uses data acquired by two opposed gamma cameras to estimate the activity of a radiopharmaceutical distribution at an unknown depth (Barnes 1996; King and Farncombe 2003). Attenuation is corrected by using a measured effective attenuation map determined by the transmission data. Classic conjugate imaging will be discussed in

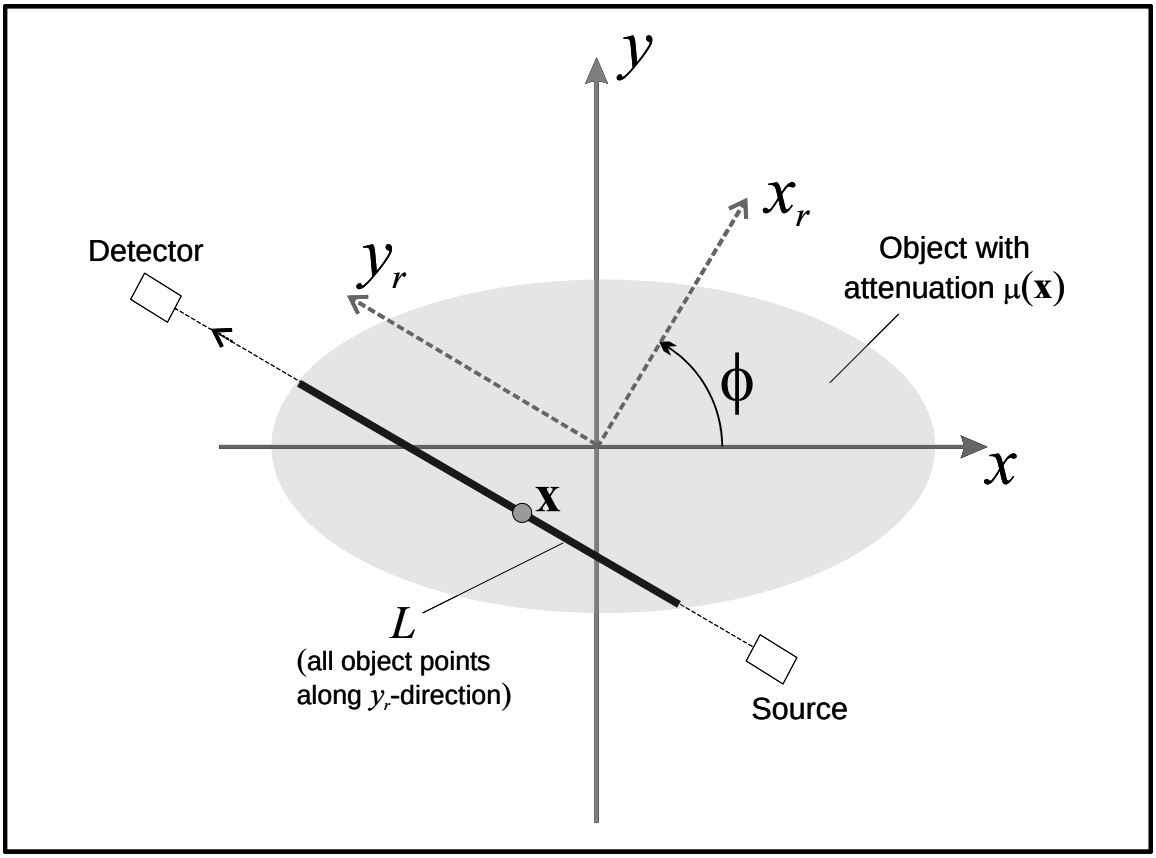



Figure 2.7. Acquisition of transmission data. Geometry and coordinate systems for patient and detector associated with a transmission projection. The patient is represented by the object with an attenuation coefficient μ(x). The patient is placed between the detector and source. The photons emitted from the source travel through the body. Some photons exiting the body are detected by the detector. The transmission measurement along L is described by the Radon integral in equation 2.5. Figure courtesy of Larry Zeng, Ph.D., at the University of Utah. (Zeng 2003)

more detail in section 2.2 as it is the foundation for the modified conjugate imaging technique presented in this dissertation. Although transmission maps are used in SPECT studies, an attenuation constant has often been uniformly applied for volumes where the distribution of attenuation coefficients is relatively uniform (Tsui 1996; Catafau 2003). This is done, for example, in the reconstruction of brain studies. For volumes with a heterogeneous distribution of attenuation coefficients, an attenuation map is applied.

Scatter contributes significantly to image data. Jaszczak estimated that about 40% of acquired image data are scattered radiation when $^{99m}$Tc radiopharmaceuticals are used (Jaszczak, Greer et al. 1984; Rosenthal, Cullom et al. 1995). This percentage can be larger for radiopharmaceuticals that also emit photons with higher energies than its primary photon emission, such as $^{123}$I (Gilland, Jaszczak et al. 1994; Dobbeleir, Hambye et al. 1999). These high-energy photons can downscatter into the photopeak window increasing the scatter fraction within that window. Although scatter-correction schemes have been developed and applied to SPECT studies, to date, scatter-correction techniques have yet to be implemented routinely in clinical settings.

King and Farncombe classify scatter correction techniques into two main categories - scatter-estimate and reconstruction-based scatter compensation (RBSC) techniques (King and Farncombe 2003). Techniques that fall into the scatter-estimation group estimate scatter contribution using acquired emission data. RBSC techniques incorporate a modeled scatter response function into an iterative reconstruction scheme. RBSC techniques use principles of scatter interactions to estimate the scatter contribution. Since RBSC techniques are used with SPECT studies, these techniques will not be discussed further.

The scatter-estimation group can be sub-divided into energy-distribution and spatial-distribution methods. Energy-distribution methods estimate scatter contribution in the photopeak window using emission data in other energy-windows. This method is a pixel-based method, i.e. it is applied to each image pixel. Several energy-distribution methods have been used, but the Compton scatter window and triple-energy window (TEW) techniques are two of the most popular. Jaszczak et al. introduced the Compton scatter window technique in which emission data from an energy window below the photopeak window are used to correct for scatter (Jaszczak, Greer et al. 1984). Ogawa et al. introduced the TEW scatter technique that uses emission data acquired in two energy windows, one abutting the lower boundary of the photopeak window and the other abutting the upper boundary of the photopeak window (Ogawa, Harata et al. 1991). This technique, detailed in this work, is often applied to single-photon emission imaging studies using radiopharmaceuticals with high-energy photon emissions, in addition to their primary photon emission. In the spatial-distribution method, emission data acquired in the photopeak window is used to estimate the source distribution and to model the source contribution to the scatter distribution. In the convolution-subtraction method, an example of a spatial-distribution method, a model of the scatter distribution function is convolves with acquired emission data to obtain an estimate of the scatter distribution. This scatter distribution is subtracted from the emission data.

Scatter contributions are not specifically addressed in the methodology of classic conjugate imaging. To account for scatter in classic conjugate imaging, one can modify the technique to include build-up factors or the projection data must be corrected using scatter-correction techniques (Wu and Siegel 1984; Barnes 1996; King and Farncombe

2003). The build-up factors can be calculated from empirical measurements or Monte Carlo computer simulations. However, the inclusion of build-up factors in the classic conjugate imaging technique increases the complexity of conjugate imaging. Although most scatter-correction techniques are applied primarily in SPECT studies, some can be modified for application to planar projection data.

The image data generated in quantitative imaging more accurately reflect the true activity distribution than do data of qualitative techniques. The primary outcome sought in use of quantitative imaging, however, is not an image, but an estimate of the radioactivity in a radiopharmaceutical distribution. The estimation of activity can be presented as an absolute activity measurement or as one of a variety of other parameters such as binding potential (Karesh 1996). The binding potential is the ratio between specific binding and non-specific binding. It is the most common measurement made in quantitative imaging.

## 2.2 Classic Conjugate Imaging

Classic conjugate imaging is a non-tomographic nuclear medicine technique that uses gamma camera projection data from two diametrically opposed views to estimate the activity in a source embedded at an unknown depth in an attenuating medium. The technique can also be used to estimate the sum of activities in multiple sources embedded at unknown depths in an attenuating medium. The projection data can be acquired simultaneously by two gamma cameras or sequentially by one gamma camera, if the tracer dissociation rate is sufficiently slow. For the remainder of this dissertation, it is assumed two gamma cameras are used. Three sets of projection data – emission,

transmission, and flood - are acquired for each view. The flood data are used to determine the camera sensitivities for each camera. The transmission data are used to estimate the transmission factor for the imaged object. The emission data are geometrically averaged and used together with the calculated camera sensitivities and effective attenuation of the medium to estimate the activity of the source.

At the roots of conjugate imaging is conjugate counting introduced in 1937 by Robley Evans (Evans 1937). Evans used anterior and posterior count data collected by a Geiger counter to estimate the total activity of radium deposits in the bones of radium dial painters. For each measurement taken, the body of a radium dial painter was curved in an arc of 1 meter radius of curvature and the Geiger counter was positioned at the radius of curvature. The advent of imaging, rectilinear and planar, introduced new imaging geometries. Sorenson evaluated the influence of source-to-detector distance on the estimation of activity using conjugate imaging for different imaging set-up geometries including Evans arc geometry (Sorenson 1974). The geometry investigated by Sorenson that is most relevant to this work is a planar imaging geometry, i.e. parallel-hole collimator imaging.

The unique aspect of conjugate imaging is the one-dimensional treatment used to determine quantitative measurements. In ideal parallel-hole collimator imaging in which the detection of scattered photons and depth dependent blurring are considered negligible, the area circumscribed by each bore in the collimator can be treated as an individual detector. As such the counts in an image pixel can be determined by one-dimensional analysis in which the depth of activity is the only variable. The derivation of conjugate imaging presented in this chapter and my discussion of an extension in Chapter VI

assume an ideal parallel-hole collimator imaging geometry, which results a one-dimensional treatment of the activity estimation problem and in pixel-by-pixel calculations.

This section discusses the methodology and mathematics of classic conjugate imaging. The discussion includes conjugate imaging of planar and volume sources, applications of classic conjugate imaging, and modified conjugate imaging techniques based on classic conjugate imaging.

### 2.2.1 The Planar Model

We assume a planar source of radioactivity embedded in a medium with a thickness T as diagrammed in figure 2.8. The medium is uniformly attenuating with an effective linear attenuation coefficient $\mu$. (That is the transmission factor at depth d is $e^{-\mu d}$.) The planar source A is at an unknown depth d. Emission data are acquired by placing the object between two opposed gamma cameras as shown in figure 2.8. The cameras in figure 2.8 are denoted as “Camera L” (left) and “Camera R” (right). This notation will be used throughout the remainder of the dissertation.

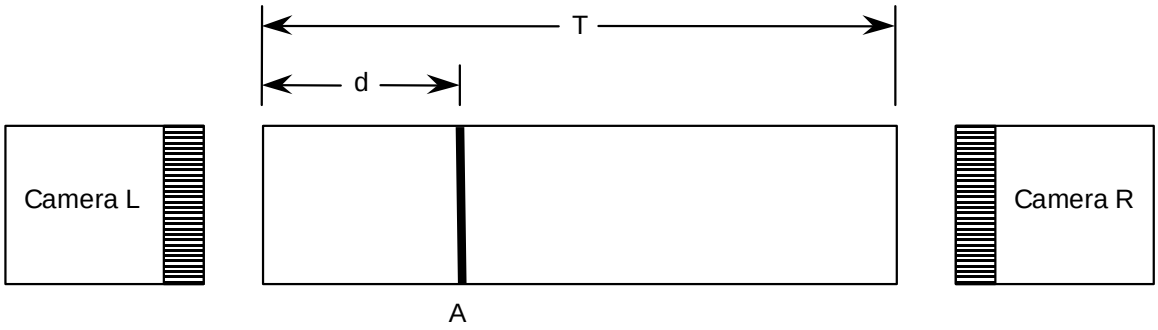



Figure 2.8. Conjugate Imaging: Acquisition of emission data. Planar source with activity A is located at a depth d within a medium of thickness T. The medium is uniformly attenuating with an effective linear attenuation coefficient μ.The object is placed between two gamma cameras, camera L and camera R for emission data acquisition.

The emission data can be expressed as

$$E_L = C_L\left(Ae^{-\mu d}\right) \tag{2.6}$$

$$E_R = C_R\left(Ae^{-\mu(T-d)}\right), \tag{2.7}$$

where $E_L$ and $E_R$ are the emission data from the left and right cameras, respectively; $C_L$ and $C_R$ are the camera sensitivities of the left and right cameras, respectively; A is the source activity; T is the total object thickness; and d is the depth of the source as measured from the right surface of the medium. The units for the emission data are counts per second (cps). The camera sensitivity is expressed as counts per second divided by disintegrations per second (cps/dps). The activity is expressed as dps. Equations 2.6 and 2.7 can be used to solve for activity A. The result is

$$A = \left( \frac{E_L E_R}{C_L C_R e^{-\mu T}} \right)^{1/2}. \qquad (2.8)$$

Since equation 2.8 is not dependent on the depth parameter d, conjugate imaging proves useful when a quantitative measurement of a source is desired but the depth of the source is unknown. Equation 2.8 cannot be solved without knowledge or measurements of the camera sensitivities, $C_L$ and $C_R$, and the transmission factor, $e^{-\mu T}$. Knowledge of these requires two additional sets of data, flood and transmission data.

Flood data are acquired by placing a uniform flood source between and equidistant from the two cameras as seen in figure 2.9. The flood source has a known

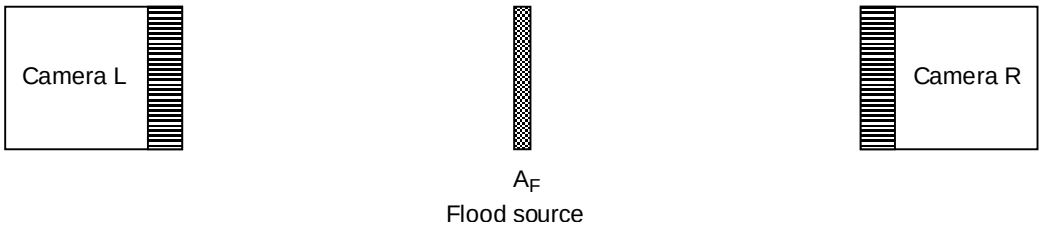



Figure 2.9. Conjugate Imaging: Acquisition of flood data. A flood source with activity $A_F$ uniformly distributed is placed between camera L and camera R. The data acquired are used to determine the camera sensitivities.

activity $A_F$. The flood data can be expressed as

$$F_L = C_L A_F \tag{2.9}$$

$$F_R = C_R A_F . \tag{2.10}$$

The camera sensitivities, $C_L$ and $C_R$, can then be obtained as

$$C_L = \frac{A_F}{F_L} \tag{2.11}$$

$$C_R = \frac{A_F}{F_R} . \tag{2.12}$$

Transmission data are needed to compute the transmission factor of the medium, $e^{-\mu T}$. Transmission data are obtained by each camera, as the data acquired by each camera are most likely different as the cameras likely have different sensitivities. When transmission data are collected by Camera L, the flood source is placed between Camera R and the object. When collected by Camera R, the flood source is placed between Camera L and the object. This is depicted in figure 2.10. In the absence of radioactivity in the object, the transmission data can be expressed as

$$T_L = C_L A_F e^{-\mu T} \tag{2.13}$$

$$T_R = C_R A_F e^{-\mu T} . \tag{2.14}$$

The transmission factor $e^{-\mu T}$ can be determined from the above equations by computing

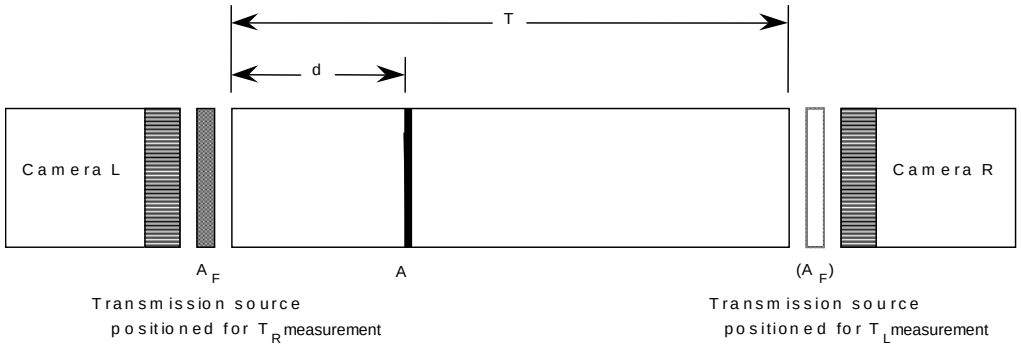



Figure 2.10. Conjugate Imaging: Acquisition of transmission data. The object with planar source located at depth d is placed between camera L and camera R. The flood source is placed between camera L and the object to acquire transmission data for camera R. Transmission data from camera L are acquired with the transmission source between camera R and the object.

the geometric mean of the transmission data, $T_L$ and $T_R$, and manipulating the resulting formula. When this is done, one obtains

$$e^{-\mu T} = \frac{1}{A_F}\sqrt{\frac{T_L T_R}{C_L C_R}}. \qquad (2.15)$$

Although ideally, transmission data would be acquired without the presence of radioactivity in the object, clinically this is usually not feasible. Accurate registration of transmission and emission data is necessary and accurate repositioning of the patient is difficult. As a result, the transmission data measured in most cases contain data from a source or sources together with data from the transmission source. The measured transmission data are expressed as

$$T_L^{'} = C_L A_F e^{-\mu T} + E_L \qquad (2.16)$$

$$T_R^{'} = C_R A_F e^{-\mu T} + E_R , \qquad (2.17)$$

where the superscript ‘ indicates a measured quantity. The emission data must then be subtracted from the measured transmssion data to obtain the true transmission data used in Equations 2.13-2.14.

### 2.2.2 The Volume Model

In this section, the extension of the planar source model to the volume source model is discussed. Activity injected into an object will not accumulate in a planar or point distribution. The activity will gather in an organ or tumor with some thickness. Self attenuation is important in sources with a measureable thickness, as potential counts may be lost due to gamma interactions within the source.

Consider activity A uniformly distributed throughout an attenuating medium of thickness t as seen in figure 2.11. The activity measured or seen by a gamma camea is referred to as effective activity, $A_{eff}$ . An infinitesimal slice of the source as seen by an ideal detector can be expressed as

$$dA_{eff} = dAe^{-\mu x} \qquad 0 \geq x \geq t , \qquad (2.18)$$

where

$$dA = \left( \frac{A}{t} \right) dx . \qquad (2.19)$$

In the above, $dA_{eff}$ is the infinitesimal amount of effective activity in an infinitesimal slice dx; dA is the infinitesimal amount of activity in an infinitesimal slice dx; $e^{-\mu x}$ is the

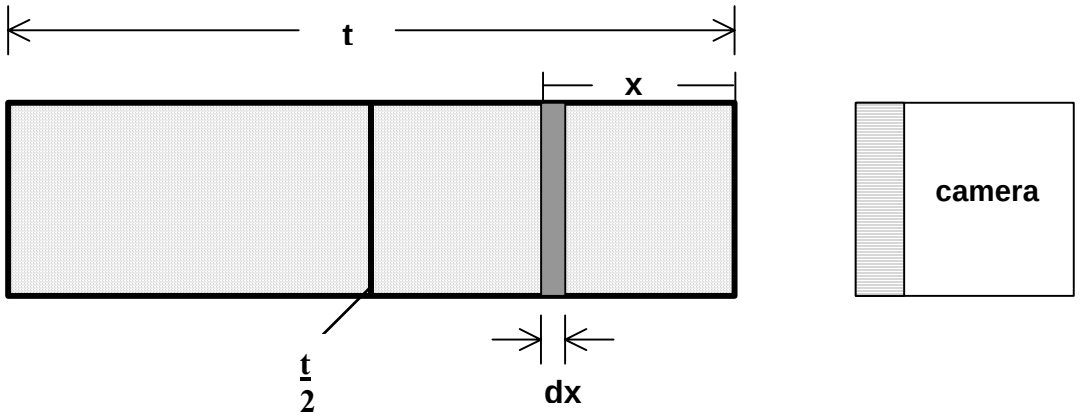



Figure 2.11. Volume source with thickness t. Activity is distributed uniformly throughout an attenuating medium with attenuation coefficient $\tilde{\mu}$.

transmission factor of activity in slice dx at depth x; A is the activity distributed throughout the source; and t is the source thickness.

The effective activity of the source is obtained by integrating equation 2.18 over the thickness of the source. The result is

$$A_{eff} = A\frac{e^{-t/2}}{f_t} \qquad (2.20)$$

where

$$f_t = \frac{\mu t/2}{\sinh\left(\mu t/2\right)} \qquad 0 < f_t < 1\,. \qquad (2.21)$$

In the above, $A_{eff}$ is the effective activity of the source; $f_t$ is a factor that modifies (increases) the $e^{-\mu t/2}$ transmission factor for a source in the middle of thickness t; and A is the activity uniformly distributed throughout the source. The transmission factor $e^{-\mu t/2}$

does not adequately represent the attenuation of activity distributed uniformly throughout thickness t. The factor $f_t$ is a correction factor that modifies $e^{-\mu t/2}$ by accounting for effects of attenuation throughout t. The magnitude of $f_t$ is dependent on source thickness. The thicker the source, the larger the value of $f_t$. For thinner sources, the self-attenuation factor has less significance. For example, assuming that 140 keV photons are distributed uniformly in a 3 cm thick slab of water and using an effective attenuation coefficient of 0.140 $cm^{-1}$, the self-attenuation factor $f_t$ of this source represents less than a 1% effect (Mintzer, Aarsvold et al. 2000).

If we replace the planar source in figure 2.8 with a volume source with a thickness t, we obtain the geometry of figure 2.12.

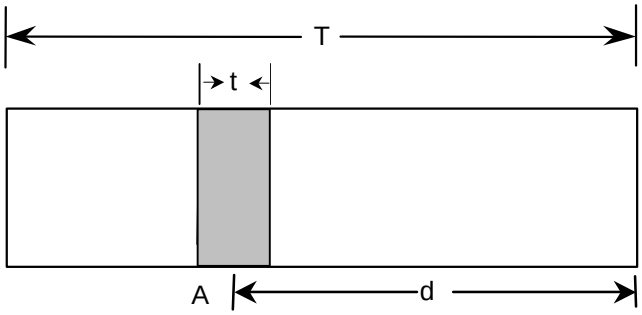



Figure 2.12. A source with thickness t embedded in an object with thickness T. The source has activity A. The depth of the source is defined as half the source t/2.

Conjugate imaging of a volumetric source is based on the same acquisitions of emission, transmission, and flood data as used for conjugate imaging of a planar source. However,

it is necessary to include the self-attenuation factor $f_t$ in models and computations. The following discussion presents the application of classic conjugate imaging to the quantification of the activity in a volume source. The emission data of a thick source can be expressed as

$$E_L = C_L A_{eff} e^{-\mu\left(T-d-t/2\right)} \tag{2.22}$$

$$E_R = C_R A_{eff} e^{-\mu\left(d-t/2\right)}, \tag{2.23}$$

where

$$A_{eff} = A\frac{e^{-t/2}}{f_t}. \tag{2.24}$$

Here, $E_L$ and $E_R$ are the emission data acquired from the left and right cameras, respectively; $C_L$ and $C_R$ are the camera sensitivities of the left and right cameras, respectively; $A_{eff}$ is the effective source activity; and $f_t$ is the self-attenuation factor of the thick source. Substituting the value of $A_{eff}$ (equation 2.24) into equations 2.22 and 2.23 yields the following emission data expressions:

$$E_L = C_L \frac{A}{f_t} e^{-\mu(T-d)} \tag{2.25}$$

$$E_R = C_R \frac{A}{f_t} e^{-\mu d}. \tag{2.26}$$

Taking the geometric mean of equations 2.25 and 2.26 and solving for A, the activity, we obtain:

$$A = \frac{\sqrt{E_L E_R}}{\sqrt{C_L C_R}\, e^{-\mu T}} f_t \,. \qquad (2.27)$$

As mentioned previously, the self-attenuation factor of 140 keV photons distributed uniformly in a 3 cm thick slab of water with an attenuation coefficient of 0.140 $cm^{-1}$ has less than a 1% affect on activity estimation. As a result, we assume the self-attenuation correction factor is one for sources less than or equal to 3 cm. Typically, the self-attenuation correction factor $f_t$ is usually considered equal to one for source thickness less than half the object thickness, (Shung 1992).

The transmission data and flood data are measured using the same techniques discussed in the planar model section.

### 2.2.3 Sum of Two Sources

The sum of activity from two sources separated by a known distance, s, can be estimated by use of conjugate imaging (Sorenson 1974). We consider two sources of activity embedded in a uniformly attenuating object of thickness T. This is illustrated in figure 2.13. For this derivation, the sources are assumed to be thin enough relative to the attenuation coefficient that their thickness can be ignored, i.e. $f_t \approx 1$.

The emission data acquired from the left and right cameras are expressed as

$$E_L = C_L\left(A_1 e^{-\mu d_1} + A_2 e^{-\mu(d_1+s)}\right) \qquad (2.28)$$

$$E_R = C_R\left(A_1 e^{-\mu(T-d_1)} + A_2 e^{-\mu(T-(d_1+s))}\right), \qquad (2.29)$$

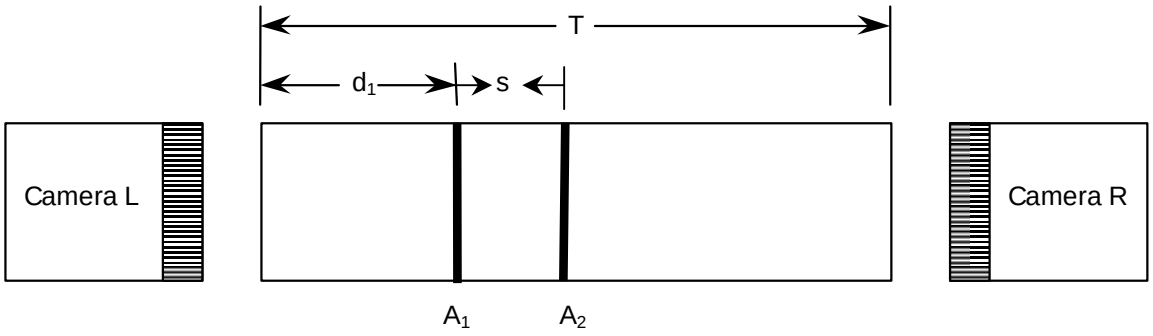



Figure 2.13. Two sources separated by a distance s in a uniformly attenuating object. The sources have activities $A_1$ and $A_2$. The object has a thickness T. The source with activity $A_1$ has a depth $d_1$. The source with activity $A_2$ has a depth T - ($d_1$ + s).

where $E_L$ and $E_R$ are the emission data; $C_L$ and $C_R$ are the camera sensitivities of the left and right cameras, respectively; and $A_1$ and $A_2$ represent the activities of the two planar sources in Figure 2.13. Taking the geometric mean of equations 2.28 and 2.29 and solving for the sum of $A_1$ and $A_2$ yields

$$(A_1 + A_2) = \left( \frac{E_L E_R}{C_L C_R e^{-\mu T}} \right)^{1/2} \left( 1 + \frac{2A_1 A_2}{(A_1 + A_2)^2} (\cosh \mu s - 1) \right)^{-1/2}. \quad (2.30)$$

By comparing equations 2.30 with equation 2.8, one finds that the second factor in equation 2.30 is the correction factor for the use of classic conjugate imaging in the estimations of the sum of the activities in two distinct sources. The correction factor is dependent on the source activity ratio and the distance between the sources. Assuming that the source activity ratio is $r = A_1/A_2$, the correction factor in equation 2.30 becomes

$$\left(1+\frac{2r}{(r+1)^2}(\cosh \mu s-1)\right)^{-1/2}. \qquad (2.31)$$

This expression has a maximum value when r = 1. This implies the largest error in determining of the sum of two sources in this setting occurs when the source activities are approximately equal (i.e. r = 1). When r = 1, the correction term is

$$\left(1+\frac{1}{2}(\cosh \mu s-1)\right)^{-1/2}. \qquad (2.32)$$

Equation 2.32 can be used to determine the upper bound for error in estimating the total activity in two sources separated by a distance s. For 140 keV photons in water, a case in which the attenuation coefficient is 0.140 $cm^{-1}$, the total activity of two sources separated by 2 cm is overestimated by 1%. However, for a separation of 6 cm, the total activity is overestimated by more than 10% (Mintzer, Aarsvold et al. 2000).

Conjugate imaging may be applied to estimate the total activity of more than two sources (Evans 1937; Sorenson 1974). Evans found that if one assumed the activity from multiple sources was placed at a single mean depth, only a small error was introduced into the estimated activity. He estimated the error for radium dial painter studies to be less than 4% and considered the error in small animal studies to be negligible (Evans 1937).

### 2.2.4 Applications

Robley Evans introduced conjugate counting in 1937 as a quantitative technique used in radium poisoning investigations. Evans used conjugate counting to estimate the amount of radium deposited in the bones of living people, specifically radium dial painters (Evans 1937). Since that time, classic conjugate imaging has been used to estimate the uptake of activity in tumors or normal organs for dosimetry calculations, therapy response estimations, and improved diagnostic assessment. However, with the advent of quantitative SPECT investigations, the employ of classic conjugate imaging has decreased such that its use is now limited.

Whole-body conjugate imaging is used to estimate biodistribution and dosimetry of radiopharmaceuticals (King and Farncombe 2003). Mozley used conjugate imaging to characterize the in vivo distribution of Tc-99m TRODAT (Mozley, Stubbs et al. 1998).

Several investigators have used conjugate imaging to estimate tumor uptake and uptake in normal surrounding tissues or organs. Thomas et. al. used conjugate imaging to estimate activity uptake in thyroid lesions to improve therapeutic treatment plans (Thomas, Maxon et al. 1976). Koral et al. applied conjugate imaging using pinhole collimators to the estimation of radiation dose to neck tumors (Koral, Adler et al. 1982). Hammond et al. presented conjugate imaging data on liver tumor uptake estimating error at less than 10% (Hammond, Moldofsky et al. 1984). Eary et al. used conjugate imaging to estimate the internal radiation dose to tumors and normal organs for radiolabeled antibody therapy (Eary, Appelbaum et al. 1989; Eary, Press et al. 1990). Eary et al. reported results with less than 6% error. Shulkin et al. used a modified conjugate imaging

technique to estimate the I-131 uptake in malignant pheochromocytomas; he reported less than 10% error (Shulkin, Sisson et al. 1988).

Sjogreen et al. used registered conjugate emission and transmission images to improve the quantitative measurements of organ uptake (Sjogreen, Ljungberg et al. 2001). Kojima et al. measured renal activity using conjugate imaging to evaluate the function of kidneys (Kojima, Ohyama et al. 2000). Yen et al. applied conjugate imaging to the determination of left ventricular volume, an important prognostic factor for patients with heart disease (Yen, Lim et al. 1994).

### 2.2.5 Extension of Classic Conjugate Imaging

Classic conjugate imaging, as described in this work, is the use of conjugate emission views and transmission measurements in the estimation of activity in a single source or the sum of activities in multiple sources embedded in a uniformly attenuating medium. The uniformly attenuating medium is assumed to contain no activity. The clinical application of standard conjugate imaging is useful for estimation of activity uptake in a single organ or tumor, or in multiple organs or tumors in dosimetric studies. These studies are usually performed under the assumptions that the body is a uniformly attenuating medium and uptake of activity in the body excluding the tumors or targeted organs is negligible. The classic conjugate imaging formulation is not sufficient for clinical cases in which organ or tumor uptake is surrounded by non-uniformly attenuating tissue or tissue with activity uptake or for clinical cases in which the estimation of the individual activities within multiple sources is desirable. Appropriate extensions of

classic conjugate imaging are necessary, if conjugate imaging is to be successfully applied in more complex settings.

#### *2.2.5.1 Non-Uniformly Attenuating Medium*

Sorenson and Thomas examined the estimation of activity in two overlapping sources embedded in a non-uniformly attenuating medium (Sorenson 1974; Thomas, Maxon et al. 1976). Figure 2.14 illustrates this geometry. Thomas designated one source to be the primary lesion and the other source to be the secondary lesion. In figure 2.14, the primary lesion is $A_2$ and the secondary lesion is $A_4$. The activity in each lesion was assumed to be uniformly distributed throughout the lesion thickness. Thomas derived a formula for the estimation of the activity in the primary lesion (Thomas, Maxon et al. 1976).

If one assumes the two positions of acquisitions are left and right of an object, the activity in the primary lesion $A_2$ is expressed as

$$A_2 = \left( \frac{E_L E_R}{e^{-\mu_e t}} \right)^{1/2} \frac{f_2}{C} g(\alpha), \qquad (2.33)$$

where $$f_2 = \frac{\left( \mu_2 t_2 / 2 \right)}{\sinh\left( \frac{\mu_2 t_2}{2} \right)},$$

$$g(\alpha) \equiv \left[ 1 + \left( \alpha \frac{f_2}{f_4} \right)^2 + 2\alpha \frac{f_2}{f_4} \cosh\left( \frac{\mu_2 t_2 + 2\mu_3 t_3 + \mu_4 t_4}{2} \right) \right]^{-1/2}, \qquad (2.34)$$

and $$\alpha = \frac{A_4}{A_2}, \qquad (2.35)$$

where $E_L$ and $E_R$ are the left and right emission data; $e^{-\mu_e t}$ is the transmission factor through the object with thickness t; $f_2$ is the self-attenuation correction factor for the primary lesion 1; and C is the system calibration factor, e.g. the camera sensitivities. The term $\mu_e$ in equation 2.33 is the effective attenuation coefficient and is expressed as

$$\mu_e = \frac{1}{t}\sum_{i=1}^{n} \mu_i t_i \ , \qquad (2.36)$$

where the index i represents the different regions of thickness $t_i$ with attenuation coefficient, $\mu_i$. The term $g(\alpha)$ is a correction factor that is dependent on the source activities ratio $\alpha$ and the thicknesses and attenuation coefficients of regions 2, 3, and 4.

Thomas compared his theoretical formalism with experimental data. The correction provided by the correction factor $g(\alpha)$ increases significantly with increasing source activities ratio. For a source activities ratio of 0.01, $g(\alpha)$ provides a correction of less than 5%. However, for a source activities ratio of 0.3, $g(\alpha)$ corrects the estimation activity by more than 20%. Thomas also reported the influence of source thickness on the source self-attenuation correction term f. For 140-keV photons the self-attenuation correction is less than 5% for source distributions less than 6-cm thick with attenuation coefficients within the experimental range reported. However, for larger source distributions the correction factor could exceed 10% (Thomas, Maxon et al. 1976).

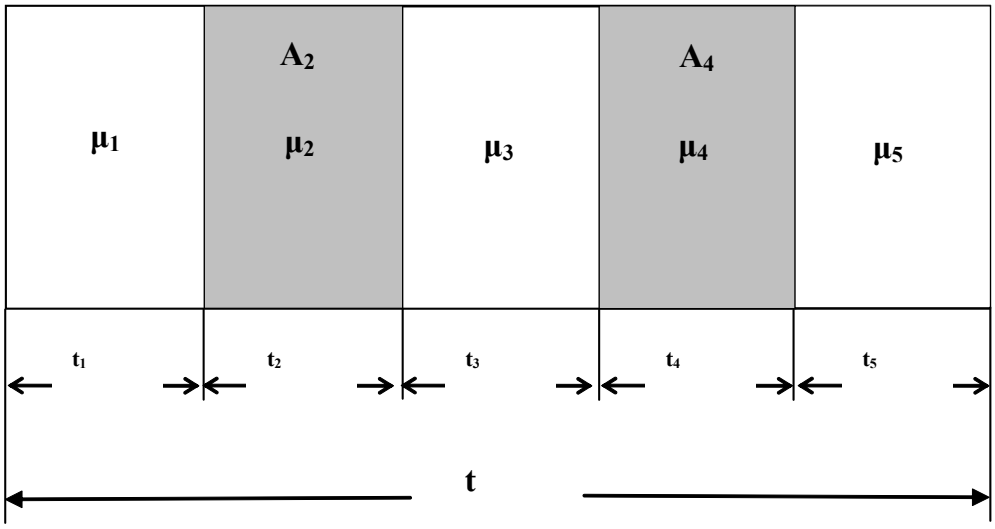



Figure 2.14. Two activity distributions embedded in a non-uniformly attenuating medium. Activities $A_2$ and $A_4$ are uniformly distributed throughout regions 2 and 4. Activity $A_2$ is the primary lesion and activity $A_4$ is the secondary lesion.

*2.2.5.2 Background Activity*

Thomas et al. also examined estimation of activity of a single lesion surrounded by background activity in an attenuating medium (Thomas, Maxon et al. 1976). This is illustrated in figure 2.15. The primary lesion is region 3 and background activity is represented by regions 2 and 4.

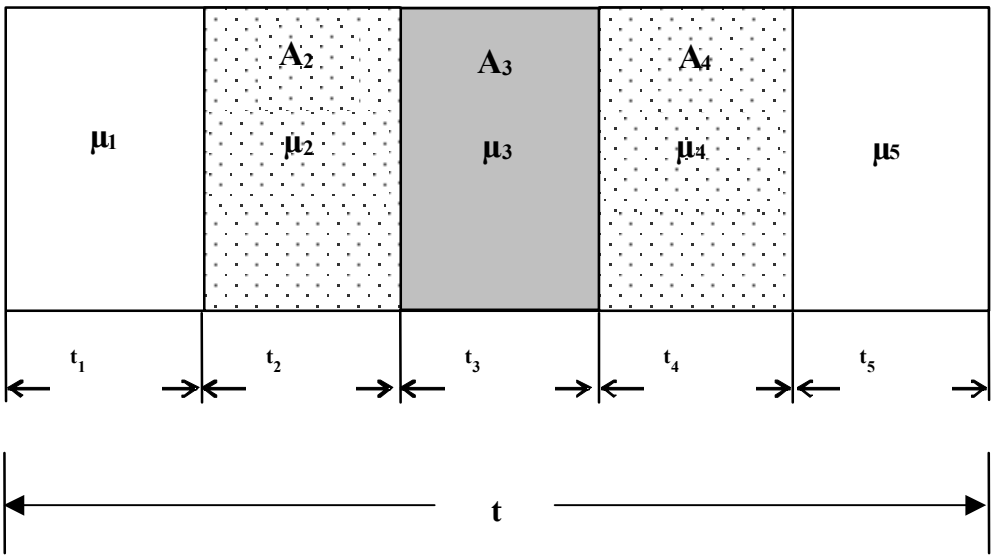



Figure 2.15. A primary lesion surrounded by regions of background activity in a non-uniformly attenuating medium. $A_3$ is the primary lesion. $A_2$ and $A_4$ are the background activities surrounding the primary lesion.

Thomas expressed the activity of the primary lesion as

$$A_3 = \left(\frac{E_L E_R}{e^{-\mu_e t}}\right)^{1/2} \frac{f_3}{C} k(\gamma), \tag{2.37}$$

with

$$f_3 = \frac{\left(\mu_3 t_3 / 2\right)}{\sinh\left(\mu_3 t_3 / 2\right)}, \tag{2.38}$$

$$k(\gamma) \equiv \left[1 + \left(\gamma_2 \frac{f_3}{f_2}\right)^2 + \left(\gamma_4 \frac{f_3}{f_4}\right)^2 + 2\gamma_2\gamma_4 \frac{f_3^2}{f_2 f_4} \cosh\left(\frac{\mu_2 t_2 + 2\mu_3 t_3 + \mu_4 t_4}{2}\right) + 2\gamma_2 \frac{f_3}{f_4} \cosh\left(\frac{\mu_2 t_2 + \mu_3 t_3}{2}\right) + 2\gamma_4 \frac{f_3}{f_4} \cosh\left(\frac{\mu_3 t_3 + \mu_4 t_4}{2}\right)\right]^{-1/2} \tag{2.39}$$

and

$$\gamma_2 \equiv \frac{A_2}{A_3}, \tag{2.40}$$

$$\gamma_4 \equiv \frac{A_4}{A_3}. \qquad (2.41)$$

In the equation 2.37, $A_3$ is the activity of the primary lesion; $A_2$ and $A_4$ are the activities in the volumes adjoining $A_3$; $E_A$ and $E_P$ are the anterior and posterior emission data, respectively; $e^{-\mu_e t}$ is the transmission factor through the object with thickness t; $f_3$ is the self attenuation correction factor for primary source with thickness $t_3$ and attenuation coefficient $\mu_3$; C is the system calibration factor, i.e. the camera sensitivity; and $k(\gamma)$ is the correction factor. The effective attenuation coefficient of the object is expressed as

$$\mu_e = \frac{1}{t}\sum_{i=1}^{n} \mu_i t_i \,. \qquad (2.42)$$

In addition to the region thicknesses and attenuation coefficients, the source activity ratios of $\gamma_2$ and $\gamma_4$ must be known to yield the source activity.

Thomas compared his theoretical calculations with experimental data. The correction factor $k(\gamma)$ significantly increases with increasing source activities ratio. For a ratio of 0.15, $k(\gamma)$ is 20% or greater (Thomas, Maxon et al. 1976).

### *2.2.5.3 Multiple Sources*

In 1981, Tsui formulated a general conjugate imaging equation for m regions of activity embedded in a medium with n attenuating regions where $m \leq n$. Each region has a uniform attenuation coefficient, $\mu_i$, and a thickness, $t_i$, where i = 1,2, . . ., n (Tsui, Chen et al. 1981). The activity in the m regions is expressed as

$$A_{i(k)} = \rho_{i(k)} t_{i(k)}, \qquad (2.43)$$

where $A_{i(k)}$ is the activity in source layer i(k); $\rho_{i(k)}$ is the activity concentration in source layer i(k); and $t_{i(k)}$ is the thickness of source layer i(k); where k = 1, 2, …, m.

The emission data measured from the left and right cameras, $E_L$ and $E_R$ are expressed as

$$E_L = C_L \sum_{k=1}^{m} A_{i(k)} e^{\left( -\left[ \frac{\mu_{i(k)} t_{i(k)}}{2} + \sum_{l=1}^{i(k)-1} \mu_l t_l \right] \right)} F_{i(k)} \qquad (2.44)$$

$$E_R = C_R \sum_{k=1}^{m} A_{i(k)} e^{\left( -\left[ \frac{\mu_{i(k)} t_{i(k)}}{2} + \sum_{l=i(k)+11}^{i(k)-1} \mu_l t_l \right] \right)} F_{i(k)}, \qquad (2.45)$$

where $C_L$ and $C_R$ are the camera sensitivities of the left and right cameras, respectively, and $F_{i(k)}$ is the self-attenuation factor for source layer i(k).

The geometric mean of the emission counts for m layers of activity embedded in n layers of attenuating medium is expressed as

$$\sqrt{E_L E_R} = \sqrt{C_L C_R} \left( -\sum_{l=1}^{n} \mu_l t_l / 2 \right) \left( \begin{array}{l} \sum_{k=1}^{m} \left( A_{i(k)} F_{i(k)} \right)^2 + 2 \sum_{\substack{k,k' \\ k \neq k'}}^{m} A_{i(k)} A_{i(k')} F_{i(k)} F_{i(k')} \times \\ \cosh \left[ \frac{1}{2} \left( \mu_{i(k)} t_{i(k)} + \mu_{i(k')} t_{i(k')} \right) + \sum_{\substack{k'' \\ k < k'' < k'}} \mu_{i(k'')} t_{i(k'')} \right] \end{array} \right)^{1/2}, \qquad (2.46)$$

where the indices k and k' denote different source layers and index k'' denotes a source layer between source layers k and k'.

For a single layer of radioactivity embedded in a medium with n attenuating regions, equation 2.47 simplifies to

$$\sqrt{E_1 E_2} = \sqrt{C_1 C_2}\, e^{\left(-\sum_{i=1}^{n} \mu_i t_i / 2\right)} \frac{A}{f}, \qquad (2.47)$$

where

$$f = \frac{\sinh\left(\mu t / 2\right)}{\mu t / 2}. \qquad (2.48)$$

Equation 2.47 is classic conjugate imaging of a thick source. The activity in the single region can be calculated if the detector/camera sensitivities, the attenuation coefficients, and the source thickness are known.

In the case of two or more aligning layers of activities embedded in a medium, the activity in each source can only be determined if the ratio of activity per unit area in each source layer and a reference source is known. The activity in the source layers can be determined through a system of simultaneous equations in terms of source activity per unit area, $A_i$.

The mathematical extensions provided by Thomas and Tsui require explicit knowledge of region thickness, attenuation coefficients, and activity ratios to determine individual activity distributions in an assembly of overlapping distributions. Clinically, knowledge of the activity ratios is usually not practical as such can generally be known only through use of invasive techniques.

## 2.3 Striatal Dopamine and Parkinsonism and Schizophrenia

Early single-photon emission imaging studies of the striatal dopaminergic system indicated that assessment of radiopharmaceutical binding to dopamine transporters and D2 dopamine receptors in the striata provide a reasonable measure of dopamine production and transmission. As a result, single-photon emission imaging performed during the last two decades has been an integral part of in vivo studies investigating abnormal dopamine production and transmission in the striatal dopaminergic system. Parkinsonism, a collection of motor disorders, and schizophrenia, a neuropsychriatic disorder, are associated with abnormal dopamine production in the striatal dopaminergic system.

Currently, diagnosis of Parkinsonism is primarily dependent on the expression of clinical symptoms and family history. Unfortunately, the various Parkinsonian disorders have very similar symptoms and the symptom presentations are usually in the later stages of the diseases. Parkinsonism imaging studies, especially Parkinson's disease imaging studies, have demonstrated success in aiding in diagnosing the disease, studying the progression of the disease (i.e. longitudinal studies), and assessing drug therapy. These studies have been qualitative and quantitative. Quantitative studies are more accurate, especially in longitudinal studies, as disease progression can be relatively slow. Consequently, clinical quantitative nuclear medicine techniques are being developed to provide a more accurate assessment of dopamine production as it pertains to Parkinsonism.

Single-photon emission studies of schizophrenia are performed to investigate the role of the striata in the pathology of the disorder as new hypotheses suggest that

excessive dopamine stimulation in the striata is not the primary reason for schizophrenia. Drug challenge imaging studies are also performed to evaluate the response of schizophrenic patients to neuroleptics. Many schizophrenia patients, who are clinically characterized to respond well to neuroleptics, do not do so. New neuroleptics are being produced to decrease side effects and increase symptom alleviation. Imaging studies are used to test and characterize these new drugs and their effects.

The motivation of the development of the modified conjugate imaging technique is the quantitative assessment of radiopharmaceutical uptake in the striata with direct clinical application to pathology studies and care management research for Parkinsonism and schizophrenia. In the following section, the anatomy and function of the striata are presented as well as Parkinsonism and schizophrenia. The role of striatal dopamine in the manifestation of these disorders is also discussed briefly.

### 2.3.1 Striata

The striata are parts of the basal ganglia, a collection of nuclei in the cerebral cortex. The basal ganglia are anatomically symmetric. One set of nuclei in the basal ganglia is located in the left hemisphere and a second is located in the right hemisphere. Collectively, the left striatum and right striatum are referred to as striata. In transaxial and coronal views of the brain, the striata appear as two aligned structures. The striata are the input portal of the basal ganglia. A striatum consists of a putamen and a caudate nucleus. However, for the scope of this dissertation, neither the putamen nor the caudate nucleus is referred to individually; they are only referred to collectively as a striatum. In addition to the striata, the basal ganglia consist of the globus pallidus, substantia nigra, and

subthalamic nucleus. The substantia nigra are each divided into two sections – substantia nigra pars compacta and substantia nigra pars recticulata. Figure 2.16 is a detailed illustration of the physiological structure of the basal ganglia (The HOPES Brain Tutorial 2003). The major tasks of the basal ganglia are to inhibit unwanted physical movement and to facilitate wanted physical movement. The basal ganglia receive input from the cerebral cortex and send information back to the cortex through the thalamus. There are two major pathways through the basal ganglia; one is direct, the other indirect. The direct and indirect pathways work together to legislate movement. The direct pathway facilitates movement and the indirect pathway inhibits movement. The amount of movement initiated is dependent on the activity in the direct and indirect pathways (Albin, Young et al. 1989; Mink 1996; Eidelberg 2003; Uhl 2003). Smooth movement is executed when the output from both pathways is in proper balance.

Peripheral, but crucial, to these pathways is the nirgostriatal pathway. The nirgostriatal pathway aids in maintaining the balance between the direct and indirect pathways through the release of the neurotransmitter dopamine. Neurons project from the substantia nigra pars compacta to the neurons in the striata. The neurons originating in the substantia nigra pars compacta synthesize dopamine and store it in vesicles. In response to stimulation, dopamine is released into the synaptic cleft (Booij, Tissingh et al. 1999). The dopamine crosses the synaptic cleft to bind with striatal dopamine receptors to stimulate the striatal neuron. The stimulated striatal neurons in turn send input to the direct and indirect pathways to modulate output from the basal ganglia (Albin, Young et al.; Mink). Figure 2.17 is a sketch of striatal neurons.

The release and production of dopamine are facilitated by dopamine transporters

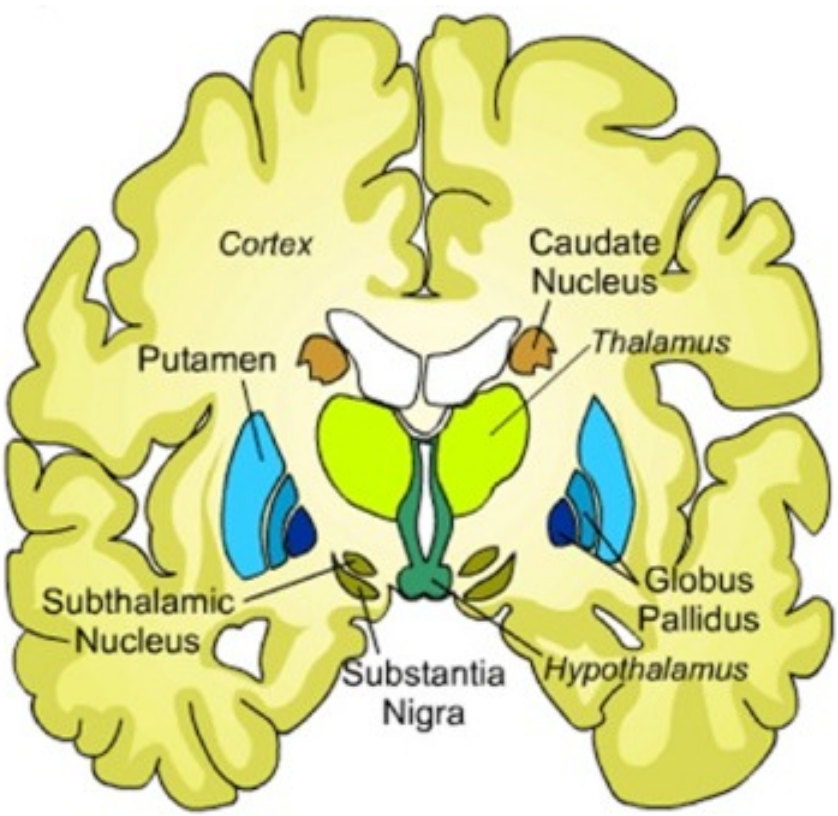



Figure 2.16. Illustration of the basal ganglia. The basal ganglia consist of the caudate nucleus, putamen, globus pallidus, subthalamic nucleus and substantia nigra. Anatomically, the basal ganglia only consist of the caudate nucleus, putamen, and the globus pallidus. The subthalamic nucleus and the substantia nigra are included because of their role in the function of the basal ganglia. The caudate nucleus and the putamen are collectively called the neostriatum; it is often called the striatum. Throughout the remainder of this dissertation striatum will be used to refer to the caudate nucleus and the putamen. The substantia nigra is also divided into two components – the substantia nigra pars compacta (SNpc) and the substantia nigra recticulata (SNpr).(The HOPES Brain Tutorial 2003)

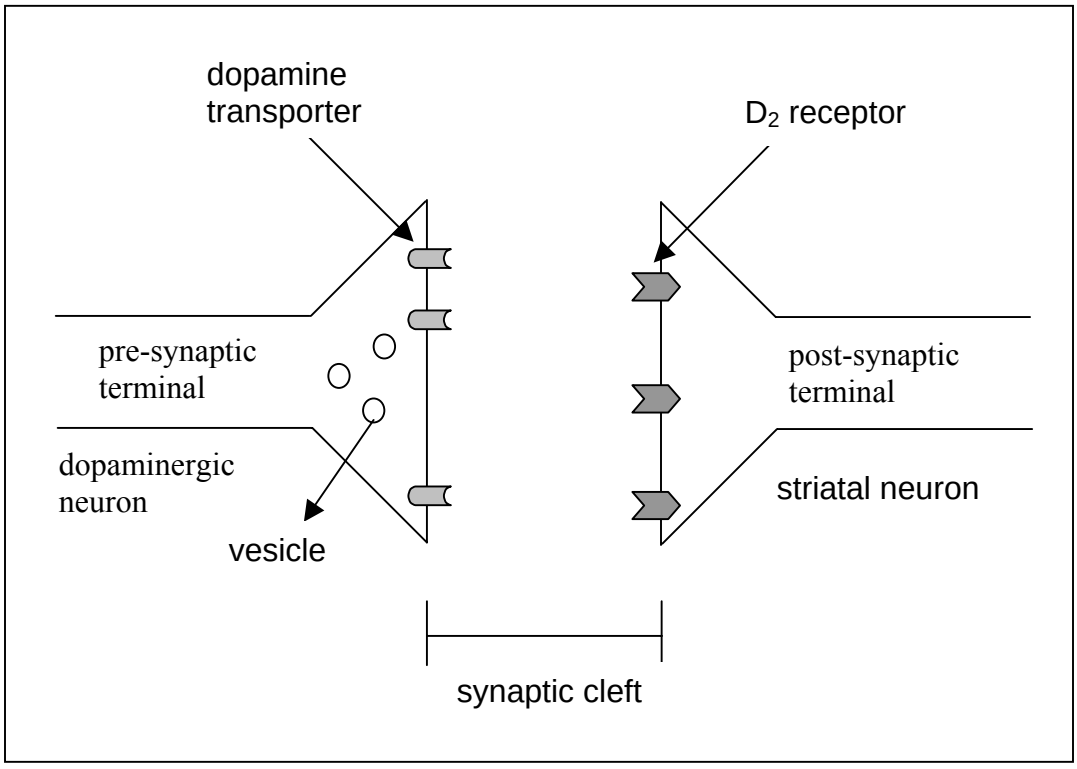



Figure 2.17. Striatal neurons. The pre-synaptic terminal is the end of a dopaminergic neuron that projects from the substantia nigra pars compacta. The dopaminergic neuron produces dopamine and releases dopamine into the synaptic cleft in response to an action potential. The dopamine released into the synaptic cleft migrates and eventually binds to the D2 receptors located on the post-synaptic terminal of a striatal neuron. When enough dopamine has bound to the receptors, an action signal stimulates the striatal neuron. Dopamine left in the synaptic cleft is transported back to the pre-synaptic terminal of the dopaminergic neuron by the dopamine transporters for reuptake.

(DAT) and dopamine receptors. Dopamine transporters are located on the ends of the neurons projecting from the substantia nigra pars compacta. This location is called the pre-synaptic terminal. Dopamine transporters aid in the release of dopamine into the synaptic cleft and are responsible for transporting the unused dopamine in the synaptic cleft back to the pre-synaptic terminal (Bourguignon, Pauwel et al. 1997; Uhl 2003). Dopamine receptors are located at the post-synaptic terminal of the striatal neurons. These receptors are the input portals of the striatal neurons. Dopamine binding to the receptors serves as a stimulus to the striatal neurons. Dopamine receptors have been categorized into at least five subtypes, which are classified into two classes, $D_1$ and $D_2$. Receptors in the $D_1$ class are receptors $D_1$ and $D_5$. $D_2$ class receptors are $D_2$, $D_3$, and $D_4$. $D_1$ and $D_2$ receptors are the most abundant with their highest concentrations being in the striata (Bourguignon, Pauwel et al. 1997). $D_1$ dopamine is released to stimulate the striatal neurons to send excitatory input to the direct pathway. $D_2$ dopamine is released to stimulate striatal neurons to send inhibitory input to the indirect pathway (Cote and Crutcher 1991).

### 2.3.2 Parkinsonism

Parkinsonism is a group of motor disorders associated with an abnormal loss of dopaminergic neurons in the nigrostriatal pathway. The group of motor disorders under the Parkinsonism moniker is often divided into four categories: primary Parkinsonism, secondary Parkinsonism, Parkinsonism-Plus syndromes, and heredodengerative disorders. Primary Parkinsonism is the most common form of Parkinsonism and is commonly referred to as Parkinson's disease (PD). Until recently, the etiology of

Parkinson's disease was unknown. But research in recent years suggests gene mutations might be the cause of Parkinson's disease. Secondary Parkinsonism includes disorders with known causes. Examples of such disorders are vascular Parkinson's disease and drug-induced Parkinson's disease. Parkinsonism-Plus syndromes are disorders associated with other degenerative diseases, e.g., multiple system atrophy (MSA) and progressive supranuclear palsy *(*PSP*)*. Heredodegenerative disorders are hereditary, e.g., Hunington's disease.

It is estimated that approximately 500,000 to 1.5 million people suffer from some form of Parkinsonism. Parkinsonism generally affects elderly people, but has been known to affect young and middle-aged adults. In an incidence study of Parkinsonism performed in Olmstead County, Minnesota, the average annual incidence rate of Parkinsonism is reported to be 114.4 per 100,000 people (Bower, Maraganore et al. 1999). About 60-85% of all cases of Parkinsonism are Parkinson's disease. Secondary Parkinsonism accounts for about 8-10% of Parkinsonism; PSP and MSA are the next most common Parkinsonian syndromes (Albanese 2003; Mayo Clinic Staff). Pathological studies suggest that PSP represents 4.0-7.5% of all Parkinsonian disorders and MSA represents 4-22% (Stacy and Jankovic 1992; Testa, Monza et al. 2001). Based on the same epidemiology study in Olmstead, Minnesota, the average annual incidence of PSP and MSA for ages 50-99 years is 5.3 and 3.0 per 100,000 people, respectively (Bower, Maraganore et al. 1999).

Parkinsonism is the manifestation of the degeneration of dopaminergic neurons in the nigrostriatal pathway. Primary (Parkinson's disease) and secondary Parkinsonism are characterized by the degeneration of the dopamine-producing neurons projecting from the

substantia nigra pars compacta. This results in the loss of dopamine and dopamine transporters; the transporters are located on the pre-synaptic terminal of these neurons. Parkinsonism-Plus syndromes are associated with the loss of striatal neurons, dopamine-receiving neurons, as well as the dopamine-producing neurons in the substantia nigra pars compacta (Tatsch 2001; Seibyl 2003).

Currently, clinical diagnosis of the specific forms of Parkinsonism is primarily predicated on the presentation of a combination of motor-deficient symptoms. These motor features are tremors at rest, bradykinesia (difficulty initiating movement), rigidity, postural instability, and a shuffling gait (freezing phenomenon) (Fahn 2003). Two or more of these symptoms must be present for a diagnosis of Parkinsonism and tremors at rest or bradykinesia must be one of the symptoms. Although the etiologies of the various forms of Parkinsonism are different, the presentation of symptoms is similar, especially in the early symptomatic stages. In addition, psuedoparkinsonism, motor disorders not associated with the degeneration of the nigrostriatal dopaminergic system, present with Parkinsonism-like symptoms. This overlapping of symptom presentation results in a moderate number of misdiagnosed cases.

Pathological studies estimate that as many as 35 % of all PD cases clinically diagnosed have been erroneously characterized (Rajput, Rozdilsky et al. 1991; Seibyl 2003). Early stages of PSP and MSA are commonly mistaken for PD. It has been estimated that about 8% to 22% of clinically diagnosed PD cases are MSA cases (Schrag, Ben-Shlomo et al. 2002). Parkinson's disease and essential tremor are frequently mistaken for one another. Some studies suggest that up to 25% of idiopathic Parkinson's disease cases were actually essential tremor cases (Quinn 1994; Booij, Speelman et al.

2001). Conversely, patients in the early stages of idiopathic PD are often misdiagnosed with essential tremor, vascular PD, drug-induced PD, or Alzheimer's disease (Seibyl 2003). Misdiagnosis is an issue that has warranted concern due to the prognosis and treatment implications.

Drug therapy has been used to mitigate the error of misdiagnosis between the various forms of Parkinsonism and other motor disorders. The response to the therapy is dependent on the motor disorder. Patients with early stage Parkinson's disease respond well to the treatment. Patients with other forms of Parkinsonism or non-Parkinsonian motor disorders do not respond to the therapy. The most common drug therapy is levodopa, a dopamine-producing drug.

Due to the high incidence rate of Parkinson's disease most treatment options for Parkinsonism are directed at the management and care of Parkinson's disease. Patients with Parkinsonism-Plus syndromes have limited treatment options. The most common and widely clinically accepted Parkinson's disease treatment is dopamine replacement using levodopa. Levodopa therapy decreases the symptoms of Parkinson's disease. However, levodopa treatment is most beneficial in the early stages of Parkinson's disease and provides on average five years of symptom relief. About 60% of patients using levodopa therapy experience sudden episodes of abnormal involuntary movements (Fahn 2003). Dopamine agonists, drugs that readily bind to the dopamine receptors to simulate the neuron, have been used to manage Parkinson's disease. Unfortunately, some of the side effects of dopamine agonists are hallucinations, confusion, and psychosis. The severity of these side effects increases with age. Neuroprotective treatments, techniques that protect the remaining dopaminergic neurons from degeneration, have been

researched but no technique developed thus far has been able to markedly stop progression of the disease.

### 2.3.3 Schizophrenia

Schizophrenia is a chronic neuropsychiatric disorder widely associated with hyper-production of dopamine. Clinically, schizophrenia is divided into five main types based on symptom expression. These schizophrenic types are hebephrenic type, catatonic type, paranoid type, undifferentiated type, and residual type. Hebephrenic schizophrenia, also referred to as disorganized schizophrenia, is characterized by hallucinations, delusions, incoherence, inappropriate laughter, and social withdrawal. Catatonic schizophrenia is characterized by motor disturbances that include alternating between immobility and wild excitement, decreased sensitivity to painful stimulus, and a decline in personal hygiene (Mental Health Channel 2004). Paranoid schizophrenia is characterized by delusions of persecution, anxiety, and violence. Undifferentiated schizophrenia is a schizophrenic type that is characterized by the expression of schizophrenic symptoms from more than one type of schizophrenia. Residual schizophrenia is characterized by the diminished expression of prominent schizophrenic symptoms.

Schizophrenia affects approximately 1% of the United States population. Typically, the onset of schizophrenia occurs in the late adolescent stage or early twenties. However, schizophrenia has been known to affect people 50 years old and below; occurrences in people above age 50 are rare. Full recovery is extremely rare.

Schizophrenic symptoms worsen after the onset of schizophrenia in approximately 75% of the people afflicted with schizophrenia (Mental Health Channel 2004).

Clinically, schizophrenic symptoms are classified into two main groups - positive and negative. Positive symptoms are characterized as symptoms that generate distorted perceptions. Positive symptoms can be divided into the psychotic group and the disorganized group. Delusions and hallucinations make up the psychotic group. Disorganized thought and speech, inappropriate behavior and erratic behavior are examples of symptoms in the disorganized group (Andreasen 1995; Andreasen 1996). Negative symptoms are characterized by a reduction of normal function and behavioral deficits (Mental Health Channel 2004). Poor speech, lack of emotion, lack of energy, and a loss of interest are examples of negative symptoms. Schizophrenia is not defined by one symptom; schizophrenic symptoms are diverse and extensive. The World Health Organization and American Psychiatric Association compiled a symptomatic criterion-based system for diagnosing schizophrenia (Andreasen 1995). If a patient exhibits two symptoms negative or positive, the patient can be diagnosed with schizophrenia. In the event that a patient exhibits a typical schizophrenic symptom, schizophrenia can be diagnosed. In either case, the symptom or symptoms must not be from another existing medical condition.

Although the causes of schizophrenia are unknown, several hypotheses have been proposed. The predominant hypothesis is the dopamine hypothesis (Carlsson and Lindqvist 1963; Creese, Burt et al. 1976; Sedvall and Farde 1995; Mann 1996; Frederickson 1998). The dopamine hypothesis suggests that schizophrenia is the manifestation of hyperactivity of dopaminergic function in the brain, specifically the

striata. Initial support of the dopamine hypothesis was indirect and based on the pharmacological studies of neuroleptic drugs. Neuroleptic drugs used to treat schizophrenia alleviate symptoms by blocking D2 dopamine receptors (Davis, Kahn et al. 1991; Schwarz, Oertel et al. 1996; Harrison 2000; Depatie and Lal 2001; Strange 2001). Thus, it was deduced that people suffering from schizophrenia have excessive dopamine stimulation of dopamine D2 receptors. Post-mortem studies performed to investigate the hyperactivity of dopamine produced inconsistent results (Laruelle 2000). With the use of single-photon emission imaging, support the dopamine hypothesis now includes data that more directly reflects dopamine production and transmission in the brain of a schizophrenic patient. For the last couple decades, reports of imaging studies included data that support of the dopamine hypothesis. In 2000, Laruelle et al. reported increased dopamine transmission in schizophrenic patients in amphetamine-challenge imaging studies (Laruelle 2000). In 2000, Abi-Dargham et al. reported data that suggest increased D2 receptor stimulation in schizophrenia patients (Abi-Dargham, Rodenhiser et al. 2000). However, critics of the dopamine theory argue that the increase of dopamine activity is actually a response to long-term drug therapy (Toru, Kurumaji et al. 1994) . Lomeña et al. performed an imaging study between neuroleptic-naïve patients (those that have never taken neuroleptics) and neuroleptic-free schizophrenia patients (those that have previously taken neuroleptics) and found no difference in D2 receptor density. This suggests that drug therapy does not increase dopamine activity (Lomena, Catafau et al. 2004).

Although the dopamine hypothesis is the most popular theory to date, dopamine hyperactivity in the striata is mainly associated with the psychotic symptoms of

schizophrenia. Laruelle et al. reported findings that demonstrated a possible relationship between dopamine hyperactivity in the striata and the negative symptoms of schizophrenia. However, it is widely accepted that negative symptoms are not influenced by the hyperactivity of striatal dopamine. Thus, alone, the dopamine hypothesis is not a sufficient hypothesis; it does not address the schizophrenic patient sub-group that has psychotic symptoms and that does not respond to neuroleptic drug therapy. It also does not offer a pathological explanation for the manifestation of negative symptoms. A hypothesis has been proposed by several investigators to explain the pathology of both negative symptoms and positive symptoms (Weinberger, Berman et al. 1988; Davis, Kahn et al. 1991; O'Donnell and Grace 1998). Their hypothesis suggests the underlying cause of negative symptoms is dopamine hypo-activity in the prefrontal cortex. Positive symptoms are associated with dopamine hyperactivity in the striata (Laruelle 2000).

Treatment of schizophrenia is continuous and requires steady administration of medication. Currently, antipsychotic drugs are used commonly in the management of schizophrenia. These drugs are divided into the traditional and the atypical category. Traditional antipsychotic drugs block dopamine D2 receptors. A common traditional antipsychotic drug is haloperidol, commercially known as Haldol. Traditional antipsychotic drugs are most effective in suppressing positive or psychotic symptoms. However, traditional antipsychotic drugs produce tardive dyskinesia, a parkinsonism-like disorder, due to the blocking of D2 receptors. Not all schizophrenia patients respond to traditional neuroleptics. Atypical neuroleptics help about 50% of schizophrenic patients that do not respond well to traditional neuroleptics. Patients that express positive symptoms are more likely to respond to neuroleptics than patients that express negative

symptoms. Atypical antipsychotic drugs block primarily serotonin, nonrepinephrine, histamine, and other dopamine receptors. These drugs suppress negative symptoms as well as positive symptoms. A common atypical neuroleptic is clozapine. A common side effect of atypical neuroleptics is agranulocytosis, the significant loss of white blood cells. New atypical drugs that work similar to atypical drugs but have milder side effects are available. These drugs work by blocking D2 receptors and serotonin receptors. Risperidone and Olanzapine are new atypical antipsychotic drugs.

## 2.4 Imaging the Striata

Critical to quantitative imaging studies is the selection and use of the appropriate radiopharmaceutical, especially for small tissue volumes, such as the striata. Selection of the right radiopharmaceutical is important because the properties of a radiopharmaceutical have a significant influence on the accuracy of measurements obtained using it. Imaging of the striata requires a radiopharmaceutical that participates in the physiological function of the nigrostriatal dopaminergic system without disruption. In addition, radiopharmaceuticals used to image the striatal dopaminergic system have a relatively high affinity for dopamine receptors or dopamine transporters, and have a low affinity for surrounding brain tissue (Halldin, Gulyas et al. 2001; Catafau 2003). These radiopharmaceuticals readily bind to the target area and unbind at a slow rate (low dissociation rate). This allows for adequate imaging time after equilibrium (steady-state condition) is reached to complete acceptable data acquisitions.

To date, most radiopharmaceuticals used for single-photon emission imaging studies of dopaminergic neurotransmission have been labeled with the radioisotope $^{123}$I.

TRODAT, which is labeled with $^{99m}$Tc, is the exception. Table 2.1 lists some radiopharmaceuticals used in dopaminergic investigations. The radiopharmaceuticals in bold print will be discussed in detail later in this chapter. Although $^{123}$I is rather expensive, it readily binds to several pharmaceutical agents that demonstrate high affinity to the dopaminergic system in the striata. It is because of this chemical reactivity that $^{123}$I is the principal radioisotope in striatal dopaminergic studies. $^{123}$I has the moderately short half-life of 13.2 hours. It has a primary photon emission of 159 keV at an abundance of 83%. However, 3% of $^{123}$I's decays results in emissions of high-energy gammas with

Table 2.1. Radiopharmaceuticals used in single-photon emission imaging studies of dopaminergic neurotransmission in humans (Catafau 2003).

| Target | Radioligand |
|---|---|
| $D_2$ receptor (post-synaptic) | **$^{123}$I-IBZM** |
| | $^{123}$I-Epidepride |
| | $^{123}$I-BF |
| | $^{123}$I-Iodospiperone |
| | $^{123}$I-Iodolisuride |
| Dopamine transporter (pre-synaptic) | **$^{123}$I-β-CIT** |
| | **$^{123}$I-FP-CIT** |
| | $^{123}$I-IPT |
| | $^{123}$I-PE21 |
| | **$^{99m}$Tc-TRODAT-1** |

energies ranging from 248 to 783 keV. Figure 2.18 is a list of the energies and yields of the primary gamma emission and high-energy gamma emissions of $^{123}$I. Due to the high-

energy emissions of $^{123}I$, special considerations need to be made, if radiopharmaceutical uptake in the striata is to be accurately assessed. High-energy emissions further complicate the problem of obtaining quantitative measurements as they have the potential of contributing a significant number of counts to image data. These emissions can travel

| Energy (keV) | % Yield |
|---|---|
| *Primary emission:* | |
| 159.0 | 82.8 |
| *High energy emissions:* | |
| 248.0 | 0.0707 |
| 281.0 | 0.0786 |
| 346.3 | 0.1250 |
| 440.0 | 0.4250 |
| 505.3 | 0.3140 |
| 529.0 | 1.3800 |
| 538.5 | 0.3790 |
| 624.6 | 0.0828 |
| 687.9 | 0.0266 |
| 735.8 | 0.0612 |
| 783.6 | 0.0590 |
| Total | 3.0019 |

Figure 2.18. Percentage yield of $^{123}I$ decays. The distribution of high-energy source emissions from the lungs and GI tract region was simulated according to the percentage yield of $^{123}I$ decays as shown in the table.

through and/or scatter in the gamma camera's collimator and interact in the scintillation crystal depositing energy in the photopeak. Such occurrences are referred to as downscatter. Downscatter degrades image quality, and more importantly, produces an

error in the estimation of the activity in the striata. The influence of downscatter from shielding and collimator penetration can be significant, when imaging patients suffering from Parkinsonism, in which the activity uptakes in the striata are small. The extent of contribution is dependent on several factors – shielding, scatter correction techniques employed, camera parameters, and radiopharmaceutical biodistribution.

Approximately 85% of all imaging procedures in the United States are performed using a radiopharmaceutical labeled with $^{99m}$Tc (Karesh 1996). As a result, nuclear medicine devices are designed to image $^{99m}$Tc radiopharmaceuticals. Although $^{99m}$Tc is the most common radioisotope used in nuclear medicine, it does not bind readily to presently used pharmaceutical agents exhibiting high affinity to the dopaminergic system. Consequently, most radiopharmaceuticals used in this context are not labeled with $^{99m}$Tc. $^{99m}$Tc TRODAT is the exception. Pharmacological studies are currently being performed to investigate the chemical reactivity of $^{99m}$Tc with other dopaminergic pharmaceuticals, because integration of a $^{99m}$Tc radiopharmaceutical into a clinical setting is easier than the integration of an $^{123}$I labeled compound (Karesh 1996; Kung, Kung et al. 2003). $^{99m}$Tc is readily available and relatively inexpensive. It has a half-life of 6 hours. Its principal photon emission is a 140 keV gamma with an abundance of 89%.

### 2.4.1 Non-specific Binding

In addition to striatal dopamine, non-neuronal dopamine can be found throughout the body as dopamine assists in regulation of gastrointestinal function, renal function, and respiratory function (Mezey, Eisenhofer et al. 1996; Pestana, Faria et al. 1997; Cabezas, Lezama et al. 2001; Cabezas, Israili et al. 2003; Tonini, Cipollina et al. 2004).

Consequently radiopharmaceutical uptake in the lungs, kidneys, gallbladder, and sections of the gastrointestinal tract is common. Radiopharmaceutical uptake in these organs is referred to as out-of- field of view (FOV) activity throughout the remainder of the dissertation. The degree of uptake depends on the specific radiopharmaceutical used. Out-of-FOV activity uptake of $^{123}$ I striatal radiopharmaceuticals poses as problem in quantitative studies because the higher energy photon emissions of $^{123}$I are sufficiently energetic to escape the body, scatter, and deposit energy into the photopeak window. The inclusion of these counts is especially problematic, when small FOV cameras are being used, such as a dedicated imaging system. Since the out-of-FOV activity is typically in the lungs and GI tract, the higher energy photons will most likely penetrate the gamma camera from the bottom. For clinical gamma cameras in which the FOV is larger, counts due to interactions of higher energy photons will be toward the bottom of the FOV away from the striatal and background ROIs used in modified conjugate imaging. But due to the smaller dimensions of small FOV gamma cameras, counts from higher energy photons are more likely to be included in the striatal ROI and background ROI.

### 2.4.2 Pre- and Post-Synaptic Radiopharmaceuticals

The radiopharmaceuticals used in the imaging of the dopaminergic system in the striata are categorized as pre-synaptic or post-synaptic. Pre-synaptic radiopharmaceuticals, also known as dopamine transporter (DAT) ligands, bind to the dopamine receptors located at the pre-synaptic terminal of the dopaminergic neuron. (The pre-synaptic terminal is the end of a neuron that projects from the substantia nigra pars compacta to the striatum. See section 2.3.) These radiopharmaceuticals are commonly

used to confirm the presence of Parkinsonism when clinical symptoms are ambiguous. Often patients with essential tremor or drug-induced Parkinson's are diagnosed with some form of Parkinsonism because the symptoms are similar. Patients suffering from Parkinsonism, however, have fewer pre-synaptic dopaminergic nerve terminals due to degeneration of the dopaminergic neurons. Patients with essential tremor have normal amounts of pre-synaptic nerve terminals (Tatsch 2001). Thus, uptake of a dopaminergic radiopharmaceutical in a patient with Parkinsonism is considerably less than such uptake in a patient with essential tremor or drug-induced Parkinson's. DAT ligands are also used for early and pre-clinical diagnosis of Parkinsonism.

Post-synaptic radiopharmaceuticals bind to the D2 receptors located on the post-synaptic terminal of a striatal neuron. These radiopharmaceuticals are used to distinguish between Parkinson's disease and other Parkinsonism forms. Parkinson's disease affects the pre-synaptic dopaminergic nerve terminals but does not affect the post-synaptic D2 receptors. This is in contrast to what happens in other forms of Parkinsonism in which both the dopamine transporters and D2 receptors are affected (Tatsch 2001). Post-synaptic radiopharmaceuticals are also important in schizophrenia, as studies have found that some schizophrenic patients have excessive dopamine and D2 receptors.

There are several pre- and post-synaptic ligands available for dopaminergic imaging in humans. See table 2.1. The biodistributions of four radiopharmaceuticals are used in the characterization and simulation of the modified conjugate imaging technique using a novel dedicated conjugate imaging system. The $^{123}$I radiopharmaceuticals, $^{123}$I β-CIT, $^{123}$I FP-CIT, and $^{123}$I IBZM, are chosen based on commercial availability and type of radiopharmaceutical – pre- or post-synaptic. Since $^{123}$I β-CIT, $^{123}$I FP-CIT, and $^{123}$I

IBZM are commercially available, European guidelines for nuclear medicine procedures exist (Tatsch, Asenbaum et al. 2002) . These guidelines are used in this study. $^{99m}$Tc TRODAT is chosen due to its clinical promise and possible ease of integration into the clinic.

#### *2.4.2.1 Biodistribution of $^{123}$I β-CIT*

Commercially known as DOPASCAN, $^{123}$I β-CIT has a high specific binding in the striatum (Seibyl, Wallace et al. 1994; Bourguignon, Pauwel et al. 1997; Messa, Volonte et al. 1998; Seibyl, Marek et al. 1998; Catafau 2003; Kung, Kung et al. 2003). Seibyl reports the striatal-to-occipital ratios for the right and left striatum to be 9.3 ±2.9 and 10.3±3.5, respectively (Seibyl, Wallace et al. 1994).The European Association of Nuclear Medicine Procedure Guidelines recommends that image data acquisition occur 18-24 hours post-injection. The recommended "standard" dose for an adult is 150-250 MBq – typically 185 MBq (5 mCi) (Tatsch, Asenbaum et al. 2002).The percent activity uptakes used in the simulation studies reported in this dissertation are taken from the biodistribution study performed by Seibyl et al (Seibyl, Wallace et al. 1994). The dose given in the study was 185 MBq within the recommended dose. The equilibrium time was taken to be approximately 21 hours, also within the recommended acquisition window. At the time of acquisition, the activity uptakes in the striata and brain are 2% and 10%, respectively of the initial activity administered. The percent uptake in the lungs, liver, and intestines is 21%, 25%, and 27%, respectively (Seibyl, Wallace et al. 1994). For the purposes of the simulation studies, the liver and small intestine uptakes are summed to get an overall activity uptake of 52%.

#### 2.4.2.2 *Biodistribution of $^{123}$I FP-CIT*

$^{123}$I FP-CIT, iodine-123-labelled N-ω-(fluoropropyl)-2β-carbomethoxy-3β-(4-iodophenyl) tropane is an N-ω-(fluoropropyl) analogue of β-CIT. It is commercially known as DATSCAN. $^{123}$I FP-CIT has a relatively high specific binding in the striata (Booij, Sokole et al. 1998; Tissingh, Booij et al. 1998; Booij, Hemelaar et al. 1999; Benamer, Patterson et al. 2000; Booij, Speelman et al. 2001). Booij reports the ratios are 2.24±0.32 ($P<0.01$) and 0.89±0.34 for healthy volunteers and Parkinson's patients, respectively, when the ratios are computed three hours post-injection (Booij, Hemelaar et al. 1999). Although the specific binding of $^{123}$I FP-CIT is lower than that of $^{123}$I β-CIT, $^{123}$I FP-CIT has faster kinetics, making one-day imaging protocols possible, which is advantageous for clinical settings (Seibyl, Marek et al. 1998; Tissingh, Booij et al. 1998; Booij, Hemelaar et al. 1999; Tatsch and Frey 2002). However, the smaller specific binding ratio and fast kinetics of $^{123}$I FP-CIT might decrease the accuracy in quantitative studies (Seibyl, Marek et al. 1998). The European Association of Nuclear Medicine Procedure Guidelines recommends that image data acquisition occurs 3-6 hours post-injection. The recommended standard dose for an adult is 150-250 MBq – typically 185 MBq (5 mCi) (Tatsch, Asenbaum et al. 2002). Figure 2.19 includes transaxial images of $^{123}$I β-CIT and $^{123}$I FP-CIT uptake in the striata of a healthy individual and a Parkinson's disease patient.

The percent activity uptakes used in the simulation studies reported in this dissertation were taken from the $^{123}$I FP-CIT biodistribution study performed by Booij et al (Booij, Sokole et al. 1998). The simulated dose used is the recommended dose of 185 MBq. The equilibrium time is taken to be approximately 3 hours. At the time of

equilibrium the activity uptakes in the striata and brain are 0.8% and 2.2%, respectively, of the initial activity administered. The percent uptakes in the lungs, liver, and intestines are 9%, 18%, and 18%, respectively (Booij, Sokole et al. 1998). For the purposes of the simulation

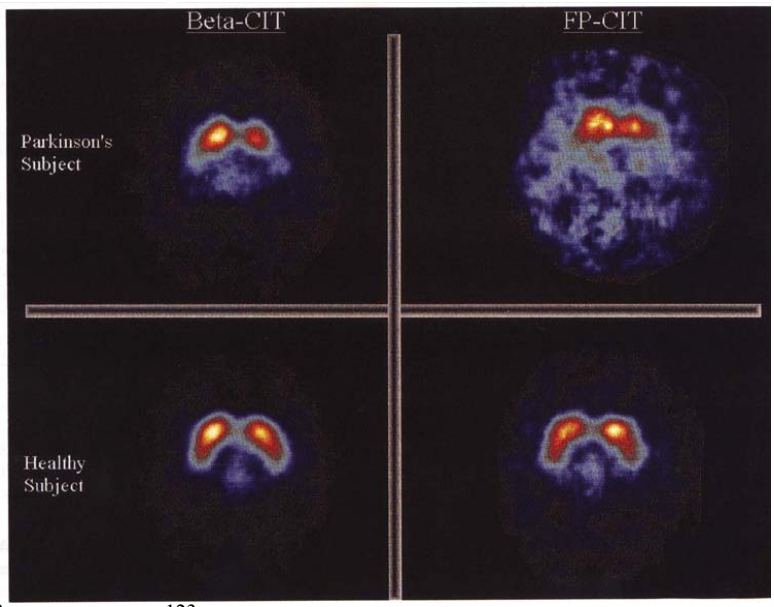



Figure 2.19. $^{123}$I β-CIT and $^{123}$I FP-CIT striatal activity uptake. SPECT axial images in healthy control subject and Parkinson's disease patient. The same healthy subject and Parkinson's disease patient were used for both radiopharmaceutical studies. For $^{123}$I β-CIT study, 6 mCi of activity are given to both subjects. For the $^{123}$I FP-CIT study, 9 mCi of activity are given to both subjects. The striatal uptake for the Parkinson's disease patients is markedly less than that of the healthy individuals. Reprinted by permission of the Society of Nuclear Medicine from (Seibyl, Marek et al. 1998).

studies, the liver and intestine uptakes were summed to get an overall activity uptake of 36%.

#### *2.4.2.3 Biodistribution of $^{99m}$Tc TRODAT*

Technetium-99m TRODAT, technetium-99m 2-[[2-[[[[3-(4-chlorophenyl)-8-methyl-8-azabicyclo[3,2,1]oct-2-yl]-methyl](2-mercapto-ethyl)amino]ethyl]amino]ethanethiolato(3-)]-oxo-1R-(*exo-exo*)]-) is a relatively new pre-synaptic (DAT) ligand. Animal and human studies have shown that TRODAT readily binds to the dopamine transporters in the striata (Kung, Kim et al. 1996,2001; Meegalla, Plossl et al. 1997; Mozley, Stubbs et al. 1998; Fang, Wu et al. 2000; Tzen, Chin-Song et al. 2001). Huang performed a study on healthy controls and Stage I and II Parkinson's disease patients and reported specific uptake values in the striatum of 1.98±0.24, 1.62±0.11, and 1.22±0.12, for the healthy controls and Stage I and II Parkinson's disease patients, respectively. The transaxial slices in figure 2.20 represent specific uptakes in controls and Parkinson's disease patients (Huang, Lin et al. 2001). Huang chose to use the occipital region as the reference region. The occipital region has low uptake of TRODAT. Occipital data can be easily compared to striatum data from the same slice. Imaging took place 165 to 195 minutes post-injection (Huang, Lin et al. 2001). The administered dose was 740 MBq (20mCi) (Mozley, Schneider et al. 2000; Huang, Lin et al. 2001). The critical organs in healthy men and women controls were the liver, kidney, and the upper large intestine (Kung, Kim et al. 1996; Mozley, Stubbs et al. 1998).

Human biodistribution studies focus on reporting radiation dosimetry. Animal studies concentrate on absolute activity uptake in organs, as invasive procedures are required in obtaining uptake information. As a result, the activity uptake information used in this dissertation is from animal studies (Meegalla, Plossl et al. 1997; Fang, Wu et al. 2000). Fang et al. reported striata uptake as percent uptake per gram and the brain uptake

as percent uptake per organ. The striata percent uptake used in the reported simulation studies was determined by multiplying the striata uptake and mass of the simulated striata. Assuming equilibrium is reached at about 60 minutes post injection, the percent uptakes of initial activity used in the reported simulation studies in the striata and brain are 0.63% and 0.12%, respectively. The activity uptake in critical organs is not used in

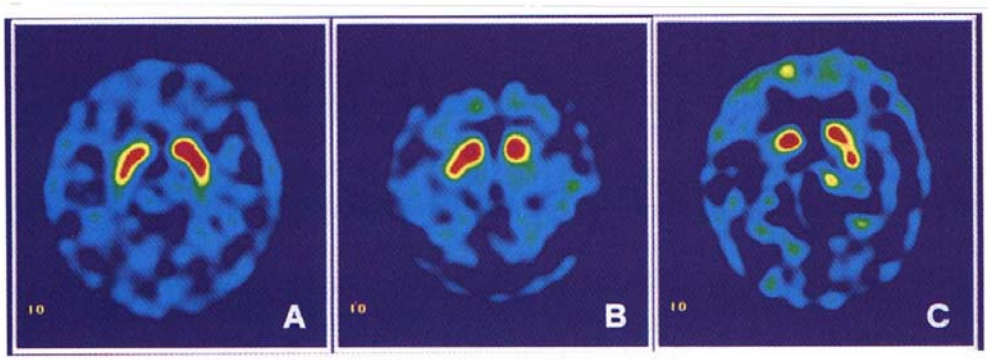



Figure 2.20. $^{99m}$Tc TRODAT-1 striatal activity uptake. SPECT axial images of Tc99m - TRODAT-1 uptake for healthy volunteer (A) and of patients with Hoehn and Yahr scale stage I (B) and stageII (C) Parkinson's disease. The Hoehn and Yahr scale (HYS) is a clinical classification system used to asses Parkinson's disease. The HYS divides Parkinson's disease into 6 stages. Stages I and II are classified as mild disease. Stage I is characterized by unilateral involvement. Stage II is characterized by bilateral disease involvement. A decrease in activity is apparent for the Parkinson's disease patients. Asymmetrical activity uptake is also apparent for the Parkinson's disease patients. Reprinted by permission of the Society of Nuclear Medicine from (Huang, Lin et al. 2001).

these studies because the photon emissions from these activity distributions are assumed to have negligible influence on the quantitative studies performed. The dose used in the studies was 740 MBq.

#### *2.4.2.4 Biodistribution of $^{123}$I IBZM*

$^{123}$I IBZM, iodine-123 ((S)-(-)-2-hydroxy-3iodo-6-methoxy-N [(1-ethyl-2-pyrrolidinyl)methyl] benzamide), is used to study dopamine systems, specifically those in Parkinsonism and schizophrenia patients (Tatsch and Frey 2002). The specific uptake ratio in the striata is relatively high (Kung, Alvai et al. 1990; Seibyl, Woods et al. 1992; Knable, Jones et al. 1995; Leslie, Abrams et al. 1996; Schwarz, Oertel et al. 1996; Leenders 2003; Lomena, Catafau et al. 2004). IBZM accumulates readily in the striatum, brain, large intestine, liver, spleen, and bladder. The critical organs are the wall of the large intestine, the spleen, and the wall of the urinary bladder (Kung, Alvai et al. 1990). The European Association of Nuclear Medicine reports the critical organs to be the thyroid and the bladder wall. The European Association of Nuclear Medicine Procedure Guidelines state the "standard" dose for an adult is 150-250 MBq – typically 185 MBq (5mCi) (Tatsch, Asenbaum et al. 2002). It is recommended that data acquisition begin 1.5-3 hours post-injection. Figure 2.20 is the image of $^{123}$I IBZM activity uptake in the striata (Leslie, Abrams et al. 1996).


Figure 2.21 $^{123}$I IBZM striatal activity uptake. Planar image of $^{123}$I IBZM uptake in the striata of a healthy subject two-hour post-injection. Striatum-to-frontal cortex uptake ratio was 1.73. Reprinted by permission of the Society of Nuclear Medicine from (Leslie, Abrams et al. 1996).

The activity uptakes used in this dissertation are taken from the biodistribution study reported by Kung et al (Kung, Alvai et al. 1990). The percent uptakes reported are for two hours post-injection. The activity uptakes in the brain, striata, lungs, liver, small intestine, and gall bladder are 2%, 1.7%, 8.1%, 9.6%, 14.2%, and 3.8%, respectively. For the purposes of the simulation studies, the liver, small intestine, and gall bladder uptakes are summed to get an overall activity uptake of 27.5%. Kung reports a brain activity uptake of 3.72% two hours post injection (Kung, Alvai et al. 1990). This brain activity uptake is for the whole brain, including the striatum. The striatum uptake is determined by volume analysis and volume estimates provided in the text of the biodistribution study.

# Chapter 3

## CONJUGATE IMAGING OF TWO ALIGNED SOURCES

As discussed in chapter 2, classic conjugate imaging has been successfully applied to the estimation of activity in a single source and to the estimation of the sum of activities in multiple sources embedded in an attenuating medium. This estimation of activity is independent of source depth. Thomas and Tsui expanded classic conjugate imaging techniques to the estimation of activity in multiple sources aligned and embedded in an attenuating medium (Thomas, Maxon et al.1976; Tsui, Chen et al. 1981). Their formulations, however, require *a priori* knowledge of activity ratios between the sources. Obtaining such activity ratios usually requires invasive procedures; a requirement that renders the technique clinically difficult at best.

Presented in this chapter is a mathematical formulation for estimation of the activities in each of two aligned sources embedded in a uniformly attenuating medium. The formulation does not require knowledge of the activity ratio between the sources. However, it does require that the depth of each source be known. The requirement of depth measurements introduces new variables as well as complexity as compared to analysis of conjugate imaging. Nonetheless, data acquisition is the same as that for classic conjugate imaging; two emission, two transmission, and two camera sensitivity data sets. The motivation for development of this extension is quantification of specific activity uptake in the striata in Parkinsonism and schizophrenia studies. Thus, the physical model used to formulate this extension is based on the anatomy of the brain, the

striata, and the specific and non-specific binding of radiopharmaceuticals used in imaging the striata.

## 3.1 Geometric Models

### 3.1.1 A Model of Striata and Head

Figure 3.1 is an illustration of a model representing activity uptake in the striata and in the surrounding brain tissue. The model consists of the skull, brain tissue, and the striata. The brain tissue has a total thickness T. The skull is represented by thicknesses $t_0$ and $t_6$ with attenuation coefficients $\mu_0$ and $\mu_6$, respectively. The brain tissue is segmented into sections of thicknesses $t_1$, $t_2$, $t_3$, $t_4$, and $t_5$ with attenuation coefficients of $\mu_1$, $\mu_2$, $\mu_3$, $\mu_4$, and $\mu_5$, respectively. The striata are represented by thicknesses $t_2$ and $t_4$. The nonspecific activities in the sections of brain tissue surrounding the striata are represented as $A_1$, $A_3$, and $A_5$. The activities in the striatal regions are represented as $A_2$ and $A_4$. Activity $A_2$ is the sum of the specific activity and the nonspecific activity in the relevant volume. Similarly, $A_4$ is a sum of specific and nonspecific activity

### 3.1.2 Simplified Model of Striata and Head

To obtain a more tractable model of striata and head, several assumptions are made about the characteristics of the brain and the striata of the model illustrated in figure 3.1. Assuming that the nonspecific activity concentration is constant throughout the brain tissue, the nonspecific activities in the sections of brain tissue are proportional to the brain thickness.

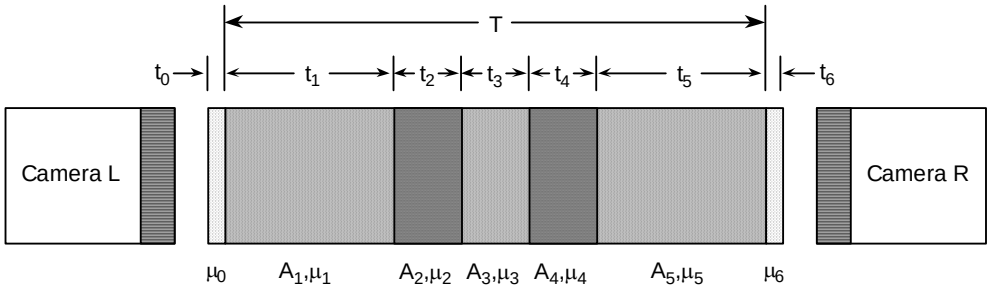



Figure 3.1. Seven-volume model of the head. Volumes 0 and 6 represent the skull. Regions 1, 3, and 5 represent the brain tissue excluding the striata. Regions 2 and 4 represent the striata.

The total nonspecific activity in the brain is the sum of $A_1$, $A_3$, $A_5$, and the percentages of $A_2$ and $A_4$ representing the nonspecific activities in the striatal regions. The nonspecific activity in the brain tissue is referred to as background activity throughout the remainder of the dissertation.

The self-attenuation correction factor of a source with a thickness of 3 cm that emits 140 keV photons has less than 1% effect. Since the thickness of each striatum in humans is on average 3 cm, the activity distributions in the striatal regions are treated, in this model, as if the activity was concentrated in the middle of each striatal region (Hokama, Shenton et al. 1995; Mintzer, Aarsvold et al. 2000). The brain consists of soft tissue regions with similar attenuation coefficients. As a result, it is assumed the brain tissue is a single attenuating medium with a constant attenuation coefficient.

The application of these assumptions is illustrated in figure 3.2. The total brain thickness is denoted T. The skull is represented by thicknesses $t_L$ and $t_R$; the subscripts L and R denote the left and right sides, respectively. The attenuation coefficient for skull is

denoted $\mu_b$. The attenuation coefficient for the brain tissue is denoted $\mu$. The uniformly distributed background activity in the brain tissue is denoted $A_B$. The specifically bound activities in the striata are denoted $A_1$ and $A_2$. The depth of $A_1$ is $d_1$ as measured from the left edge of brain tissue. The depth of $A_2$ is $d_2$ as measured from the right edge of brain tissue. The distance between the striatal activities is denoted s. The brain model depicted in figure 3.2 is the basis for the work presented in the dissertation. It is used to formulate the mathematics of conjugate imaging of two aligned sources.

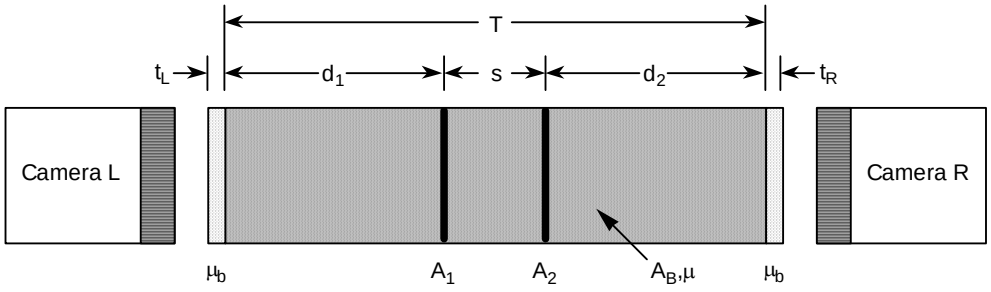



Figure 3.2. Simplified seven-region model. The activity in sections 1, 3, and 5 in figure 3.1 represent non-specifically bound activity $A_B$. This activity is referred to as background activity and is uniformly distributed throughout the brain. Activities $A_1$ and $A_2$ represent the sum of specifically bound activity in the striata and background activity. The specific activity distributions in the striata are planar as the thickness of the striata is such that self-attenuation is negligible.

## 3.2 Parameters Required

Using conjugate imaging to estimate the activity in each of two aligned sources requires knowledge of the striatal depths $d_1$ and $d_2$, the brain thickness T, the skull

thicknesses $t_L$ and $t_R$, and the attenuation coefficient of the skull $\mu_b$. Computed tomography or magnetic resonance imaging can be used to determine a head thickness, depths of the striata, and skull thicknesses. The skull attenuation factors can be determined alternatively from skull thickness measurements and an empirically determined bone attenuation coefficient. The techniques employed to obtain measurements of these parameters are not the focus of this discussion and will not be discussed further. For this discussion, it is assumed that the striatal depths $d_1$ and $d_2$, the brain thickness T, the skull thicknesses $t_L$ and $t_R$, and the attenuation coefficient of the skull $\mu_b$ have been determined.

### 3.3 Pixel-based Computations and Analyses

In conjugate-imaging data acquisition, each pixel in each emission, transmission, and flood projection represents the fraction of the imaged object that corresponds to the volume of the object from which the pixel records data. Thus, all activities, sensitivities, transmission factors and thicknesses are implicit functions of pixel location. The count data acquired from emission, transmission, and flood acquisitions are often referred to as maps. Conjugate imaging calculations are performed independently for each pixel within these maps. As a result, the conjugate imaging technique is implicitly pixel dependent. However, some desired quantities, e.g., total activity in each striatum, require that the values in a range of pixels delineated by regions of interest (ROIs) be summed or averaged. The ROIs used in the modified conjugate imaging technique are a striatal ROI and a background ROI. The striatal ROI is defined on an image or data set by delineating a region of inclusion of striatal pixels. The background ROI is a set of pixels defining brain tissue that does not include the striata.

All count maps are normalized and decay-corrected to yield count rate maps at a common time. The number of counts collected in a pixel between times $t_1$ and $t_2$, relative to time $t_0$, is

$$N = C\int_{t_1}^{t_2} A_0 e^{-t/\tau} dt \,, \tag{3.1}$$

where $N$ is the number of counts collected; $C$ is the pixel sensitivity in counts per unit time per unit activity; $A_o$ is the activity at time $t_o$; $t_1$ and $t_2$ are the start count acquisition time and end count acquisition time, respectively; and $\tau$ is the mean lifetime of the radioisotope. The normalized, decay corrected count rate at time $t_o$ represented by measured count N is

$$\dot{N}_o \equiv CA_0 = \frac{N}{\tau\left[e^{-t_1/\tau} - e^{-t_2/\tau}\right]}. \tag{3.2}$$

The denominator in equation 3.2 is referred to as the normalization factor. This factor is determined using a reference time $t_o$. Each count map is divided by the appropriate normalization factor to obtain the corresponding decay-corrected count rate map.

### 3.4 Conjugate Imaging of Two Aligned Sources

As with classic conjugate imaging, two emission, two transmission, and two flood count map data sets are acquired in the conjugate imaging of two aligned sources.

However, the data analysis used in determining the activity above background activity (the striatal specific activity minus the non-specific activity) in each of the two aligned sources is quite different from that used in classic conjugate imaging. In this section, the data analysis in conjugate imaging of two aligned sources is discussed.

The emission data in conjugate imaging of two aligned sources, as in classic conjugate imaging, are measurements of the attenuated activity of the sources inside the object. The emission data are used to determine the activity in the striata above the background activity. The emission count maps of the model in figure 3.2 in the striatal ROI are expressed as

$$E_L = C_L k_L \left( A_1 e^{-\mu d_1} + A_2 e^{-\mu (d_1 + s)} + B \right) \qquad (3.3)$$

$$E_R = C_R k_R \left( A_1 e^{-\mu (d_2 + s)} + A_2 e^{-\mu d_2} + B \right), \qquad (3.4)$$

where

$$k_L = e^{-\mu t_L} \qquad (3.5)$$

$$k_L = e^{-\mu t_L}, \qquad (3.6)$$

$E_L$ and $E_R$ are the emission data from the left and right cameras, respectively; $C_L$ and $C_R$ are the camera sensitivities in the left and right cameras, respectively; $k_L$ and $k_R$ are the transmission factors through the left and right skull thicknesses, respectively; $A_1$ and $A_2$ are the specific-uptake activities in the left and right striata, respectively; $\mu$ is the effective attenuation coefficient of the brain tissue; $d_1$ and $d_2$ are the depths of the left and right striata, respectively; s is the distance between the two striata; and $B$ is the effective background activity.

The effective background activity $B$ is expressed as

$$B = \frac{A_B e^{-\mu T/2}}{f_T}, \qquad (3.7)$$

where $A_B$ is the true background activity, $f_T$ is the self-attenuation correction factor of the brain, and $e^{-\mu T/2}$ is the transmission factor through one half the brain thickness $T$.

The measured activities from the left and right gamma cameras corrected for skull attenuation, respectively, are

$$A_L \equiv \frac{E_L}{C_L k_L} = \left(A_1 e^{-\mu d_1} + A_2 e^{-\mu(d_1+s)} + B\right) \qquad (3.8)$$

$$A_R \equiv \frac{E_R}{C_R k_R} = \left(A_1 e^{-\mu(d_2+s)} + A_2 e^{-\mu d_2} + B\right). \qquad (3.9)$$

The background activity in the striatal ROI is subtracted from the total activity in the striatal ROI to yield the sum of measured activities above background in each striatum. The specific activities as measured by the left and right gamma cameras within the striatal ROI, respectively, are thus defined as

$$\delta A_L \equiv \left(A_L - \langle B \rangle_{str}\right) = A_1 e^{-\mu d_1} + A_2 e^{-\mu(d_1+s)} \qquad (3.10)$$

$$\delta A_R \equiv \left(A_R - \langle B \rangle_{str}\right) = A_1 e^{-\mu(d_2+s)} + A_2 e^{-\mu d_2}, \qquad (3.11)$$

where $\langle B \rangle_{str}$ is the average background activity within the striatal ROI. Equations 3.10 and 3.11 are linear in $A_1$ and $A_2$ and can be solved for $A_1$ and $A_2$ yielding

$$A_1 = \frac{\delta A_L e^{\mu d_1} - \delta A_R e^{\mu(d_2 - s)}}{1 - e^{-2\mu s}} \tag{3.12}$$

$$A_2 = \frac{\delta A_R e^{\mu d_2} - \delta A_L e^{\mu(d_1 - s)}}{1 - e^{-2\mu s}}. \tag{3.13}$$

These expressions represent the activity in each pixel in the striatal ROI. These activities are summed over the striatal ROI to yield the total activity in each striatum. The total activity in each striatum is then

$$U_1 = \sum_{i,j \in str} A_1 \tag{3.14}$$

$$U_2 = \sum_{i,j \in str} A_2 , \tag{3.15}$$

where $U_1$ and $U_2$ are the total activity measured in each striatum; $A_1$ and $A_2$ are the activities of each striatum; and the summation indices *i* and *j* indicate pixel location.

The background activity in the striatal ROI is determined from the background activity in a ROI defined in a region on the acquired data that contains only background activity. In a background-only ROI where $A_1$ and $A_2$ equal zero, the emission count maps are

$$E_L = C_L k_L B \tag{3.16}$$

$$E_R = C_R k_R B , \tag{3.17}$$

where *B* is the effective background activity. Equation 3.7 describes effective background activity, taking into account self-attenuation. The measured background activities $B_L$ and $B_R$ in the background-only ROI as measured by the left and right gamma cameras, respectively, are

$$B_L \equiv \frac{E_L}{C_L k_L} \tag{3.18}$$

$$B_R \equiv \frac{E_R}{C_R k_R}. \tag{3.19}$$

The average background activity B for each pixel in the background-only ROI, is determined by taking the geometric mean of $B_L$ and $B_R$

$$B = \left(B_L B_R\right)^{1/2}. \tag{3.20}$$

The background activity values determined for the pixels in the background-only ROI are then averaged to yield an average measured background activity $\langle B \rangle_{bkgd}$. From equation 3.7, the average activity in the background-only region can be obtained using

$$\left\langle A_B \right\rangle_{bkgd} = \left\langle \frac{B}{e^{-\mu\frac{T}{2}}} f_T \right\rangle_{bkgd}. \tag{3.21}$$

If the average brain tissue thickness imaged by the pixels in the striatal ROI is equal to that imaged by the pixels in the background-only ROI, the average measured background activity in the background-only ROI is equal to the averaged background activity in the striatal ROI. If the average brain tissue thickness imaged by the pixels in the striatal ROI $<T>_{striatal}$ is different from that imaged by the pixels in the background ROI $<T>_{bkgd}$, the average measured background activity in the striatal ROI is computed by scaling the average total background activity in the background ROI with the average thickness ratio. The approximate average background activity in the striatal ROI is expressed

$$\langle A_B \rangle_{str} = \langle A_B \rangle_{bkgd} \frac{\langle T \rangle_{str}}{\langle T \rangle_{bkgd}}, \qquad (3.22)$$

where $<A_B>_{str}$ is the average background activity in the striatal ROI; $<A_B>_{bkgd}$ is the average background activity in the background-only ROI; $<T>_{str}$ is the average brain tissue thickness within the striatal ROI; and $<T>_{bkgd}$ is the average brain tissue thickness imaged by the background-only ROI. The measured average background activity in the striatal ROI is then

$$\langle B \rangle_{str} = \langle A_B \rangle_{str} \frac{e^{-\mu \langle T \rangle_{str}/2}}{f_{\langle T \rangle_{str}}}. \qquad (3.23)$$

The two flood count maps are acquired to calculate the camera sensitivities of the left and right gamma cameras $C_L$ and $C_R$, respectively. The flood data are expressed as

$$F_L = C_L A_F \tag{3.24}$$

$$F_R = C_R A_F , \tag{3.25}$$

where $F_L$ and $F_R$ are the flood counts from the left and right gamma cameras; $C_L$ and $C_R$ are the camera sensitivities for the left and right cameras, respectively; $A_F$ is the activity in the flood.

The transmission data are acquired for use in the calculations of the effective attenuation coefficient of the brain. This differs from the classic conjugate technique in that a map of effective attenuation coefficient $\mu_{eff}$ is desired instead of a map of transmission factor $e^{-\mu T}$ of the object. During acquisition of transmission data, the camera is detecting photons from the flood that are attenuated by the skull thicknesses $t_L$ and $t_R$ and the brain thickness T. The transmission data are acquired after the injection of the radiopharmaceutical. As a result, the transmission images will include counts representing transmission and emission gammas. The emission data are subtracted from the transmission/emission data to yield transmission data only. The data are

$$T_L = F_L k_L k_R e^{-\mu T} \tag{3.26}$$

$$T_R = F_R k_L k_R e^{-\mu T} , \tag{3.27}$$

where $T_L$ and $T_R$ are the transmission counts acquired by the left and right cameras, respectively. The transmission factors for the left and right skull thickness are

$$k_L = e^{-\mu_b t_L} \tag{3.28}$$

$$k_R = e^{-\mu_b t_R} . \tag{3.29}$$

Although not necessary, the following assumption is made to simplify some of the discussion. It is assumed

$$t_L = t_R = t_b , \tag{3.30}$$

that is, it is assumed that the left and right skull thicknesses are equal. Calculation of the geometric mean of the $T_L$ and $T_R$ of equations 3.27 and 3.28 yields $\mu T$ (and thus $\mu$) as

$$\mu T = -\frac{1}{2}\ln\left(\frac{T_L T_R}{F_L F_R}\right) - 2\mu_b t_b . \tag{3.31}$$

The skull transmission factors and the attenuation coefficient maps are then used in the emission data equations.

The sum of the two specific uptake activities $A_1$ and $A_2$ can also be determined using the same sets of acquired data – emission, transmission, and flood. This corresponds to use of classic conjugate imaging for determination of the sum of activity of multiple aligned sources.

As previously discussed in this section, the background activity in the striatal ROI $\langle B \rangle_{str}$ is subtracted from the striatal and background activity emission data in the striatal ROI. The resulting emission data in the striatal ROI as measured by the left and right gamma cameras, respectively, are

$$E_L^{'} \equiv E_L - C_L k_L \langle B \rangle_{str} = C_L k_L \left( A_1 e^{-\mu d_1} + A_2 e^{-\mu (d_1 + s)} \right) \qquad (3.32)$$

$$E_R^{'} \equiv E_R - C_R k_R B_{caud} = C_R k_R \left( A_1 e^{-\mu (d_2 + s)} + A_2 e^{-\mu d_2} \right), \qquad (3.33)$$

where $E_L'$ and $E_R'$ are the left and right specific activities above background activity in the striatal ROI.

The combination of Equations 3.32 and 3.33 leads to the expression of the sum of the specific uptake activities $A_1$ and $A_2$, i.e.

$$(A_1 + A_2) = \left( \frac{E_L^{'} E_R^{'}}{C_L C_R k_L k_R e^{-\mu T}} \right)^{\frac{1}{2}} \left( 1 + \frac{2 A_1 A_2}{(A_1 + A_2)^2} (\cosh(\mu s) - 1) \right)^{-\frac{1}{2}} \qquad (3.34)$$

with

$$k_L k_R e^{-\mu T} = \left( \frac{T_L T_R}{F_L F_R} \right)^{\frac{1}{2}}. \qquad (3.35)$$

Equation 3.34 is essentially the classic conjugate imaging equation with a source separation correction factor (the second factor on the right-hand side of the equation). The expression is similar to equation 2.9 in Chapter 2. If the distance between two aligned sources, denoted as s, is reduced to zero, equation 3.34 reduces to the classic conjugate imaging equation for a single source. The magnitude of source separation influences the accuracy of the estimation of total activity. A large source separation results in an overestimation of the total activity.

The total striatal activity is obtained by summing the values of the pixels in the striatal ROI, which were determined using equation 3.34. The total activity in the striatal ROI is then expressed as

$$U_T = \sum_{i,j \in str} \left( A_1 + A_2 \right), \tag{3.36}$$

where $U_T$ is the total activity; $A_1$ and $A_2$ are the specific activity uptakes in the striata; and the summation indices $i$ and $j$ indicate the pixel location. The total activity calculation does not require precise knowledge of the brain tissue attenuation coefficient $\mu$ or of the depths of the striata.

## 3.5 Error Analysis

Regardless of technique, quantitative analysis of radiotracer uptake is associated with sources of error. These errors are due to counting statistics, depth dependent blurring, partial-volume effects, detection of scattered radiation, and possible error in measurement of the standard and/or administered activities. The conjugate imaging method presented in this chapter requires the estimation of several parameters. In addition to usual sources of error associated with estimating radiotracer uptake, errors in these estimated parameters may propagate error and further limit accuracy. The parameters of concern are the skull attenuation coefficient $\mu_b$, the skull thickness $t_b$, the total brain-tissue thickness T, and the depths of the centers of striata, $d_1$ and $d_2$.

Error in the estimation of $\mu_b t_b$ affects the determination of the average effective brain-tissue attenuation coefficient $\mu$ and calculation of the left and right specific activity

maps $\delta A_L$ and $\delta A_R$. Error in T also effects the determination of μ. Errors in μ, $\delta A_L$, $\delta A_R$, $d_1$, and $d_2$ result in error in the estimation of $A_1$ and $A_2$ and ultimately in the estimates of the total specific activity uptakes $U_1$ and $U_2$.

The skull attenuation coefficient $\mu_b$ needs to be determined either by scaling the attenuation coefficient measured with tissue-equivalent material by a factor appropriate to the different compositions of tissue and skull matter or by actual experiments on samples of skull material. The thickness of the head, which is $T+2t_b$, can be measured externally. A computed tomography scan of the head is required to estimate accurately the dimension of the skull thickness $t_b$ and the depths of the striata $d_1$ and $d_2$. A database of these dimensions as a function of externally accessible measurements for primates or humans could be used. However, using dimensions from such a database might increase uncertainties in these quantities.

### 3.5.1 Uncertainty of Bone Attenuation Coefficient $\mu_b$

The error in $\mu$ due to uncertainties in $\mu_b t_b$ can be estimated using,

$$\mu T = -\frac{1}{2}\ln\left(\frac{T_L T_R}{F_L F_R}\right) - 2\mu_b t_b . \qquad (3.37)$$

This equation is used to determine the effective attenuation coefficient of brain tissue. (Refer to equation 3.31.) The last term $2\mu_b t_b$ represents and removes the attenuation of the skull. To estimate the error in $\mu$ due to uncertainties in $\mu_b t_b$ typical values for skull and brain thicknesses and an estimate of $\mu_b$ of primates and humans are used. The skull and

brain thicknesses are assumed to be 5 mm and 10 cm, respectively. Using attenuation measurements of 140 keV photons in water published by Thomas et al. the skull attenuation coefficient $\mu_b$ is determined to be approximately 1.3μ (Thomas, Maxon et al. 1976). The $2\mu_b t_b$ term results in about a 13% correction to μT using a 5 mm skull thickness, a 10 cm brain thickness, and a skull attenuation coefficient of 1.3μ. A 20% overestimate of $\mu_b t_b$ would cause about a 2.5% underestimate of μT. Error in the measurement of brain thickness T would also affect the accuracy of the value for μ. However, assuming that the determination of T to within 1 or 2% is possible, the total uncertainty in μ can be kept less than 5%.

Uncertainties in the specific-uptake activity maps $\delta A_L$ and $\delta A_R$ due to errors in $\mu_b t_b$ are estimated using the same values for the estimation of error in μ. A 20% overestimation of $\mu_b t_b$ causes less than 2% underestimates of $\delta A_L$ and $\delta A_R$. Due to this uncertainty, we expect estimation of $\mu_b t_b$, T, and μ to result in an error of less than 2% in $U_1$ and $U_2$.

### 3.5.2 Uncertainty of $A_1$-to-$A_2$ Ratio

The uncertainty in the activity in each striatum $A_1$ and $A_2$, due to errors in μ and errors in the depth measurements $d_1$ and $d_2$, can be expressed as a function of the ratio of the two source activities

$$\frac{A_1}{A_2} = \frac{\delta A_L e^{\mu d_1} - \delta A_R e^{\mu(d_2 - s)}}{\delta A_R e^{\mu d_2} - \delta A_L e^{\mu(d_1 - s)}}. \qquad (3.38)$$

where $A_1$ and $A_2$ are the activity uptakes in the striata and $\delta A_L$ and $\delta A_R$ are the left and right measured specific-uptake activities in the striatal ROI, respectively. Assuming $d_1$ and $d_2$ are equal, Equation 3.38 becomes

$$\frac{A_1}{A_2} = \frac{r - e^{-\mu s}}{1 - re^{-\mu s}} \tag{3.39}$$

$$r = \frac{\delta A_L}{\delta A_R}, \tag{3.40}$$

where $r$ is the ratio of measured specific activities in the striatal regions as detected by the left and right gamma cameras. Assuming the activities of the sources to be at least the background activity ($A_1 \geq 0$, $A_2 \geq 0$), the ratio of measured specific activities r is limited by the attenuation coefficient μ and distance between the two aligned source distributions s. The actual relationship is $e^{\mu s} \geq r \geq e^{-\mu s}$. For the values of $\mu \approx 0.14$ cm$^{-1}$ and $s \approx 2$cm, r ranges from about 0.76 to 1.32. The ratio ranges from 0.8 to 1.2 for striatal uptake ratios of 1:5 to 5:1. For values of $\mu \approx 0.15$ cm$^{-1}$ and $s \approx 2$ cm, r ranges from about 0.7 to 1.2 for activity ratios of 1:5 to 5:1.

### 3.5.3 Uncertainty of Brain Tissue Attenuation Coefficient μ

The fractional uncertainty in $A_1$ due to the uncertainty in μ is

$$\frac{\Delta A_1}{A_1} = \left( \frac{d}{s} + \frac{e^{-\mu s}}{r - e^{-\mu s}} - \frac{2e^{-2\mu s}}{1 - e^{-2\mu s}} \right) s \Delta\mu, \tag{3.41}$$

where $\Delta A_1/A_1$ is the fractional uncertainty; $d$ is the depth of each striatum; $s$ is the separation distance between the striata; $r$ is the ratio of the left and right measured specific-uptake activities; and $\Delta\mu$ is the uncertainty in $\mu$. We have assumed that $d_1$ and $d_2$ are equal and have a value d. Assuming T ≈ 10 cm, $t_b \approx 5$ mm, d ≈ 4 cm, s ≈ 2 cm, and μ ≈ 0.142 $cm^{-1}$, we find that a 2.5% underestimate in μ causes an underestimate of $A_1$ from less than 1% to about 7% for the values of r corresponding to activity ratios of $A_1$ to $A_2$ from 5:1 to 1:5.

Due to the symmetry of the problem, and thus of the expressions for $A_1$ and $A_2$, the uncertainty in $A_2$ can be found by using the reciprocal value of r. The fractional uncertainty in $A_2$ due to the uncertainty in μ is

$$\frac{\Delta A_2}{A_2} = \left( \frac{d}{s} + \frac{re^{-\mu s}}{1 - re^{-\mu s}} - \frac{2e^{-2\mu s}}{1 - e^{-2\mu s}} \right) s\Delta\mu \,. \qquad (3.42)$$

Assuming T ≈ 10 cm, $t_b \approx 5$ mm, d ≈ 4 cm, s ≈ 2 cm, and μ ≈ 0.142 $cm^{-1}$, a 2.5% underestimate in μ causes an underestimate of $A_2$ from about 7% to about 2% for the values of r corresponding to activity ratios of $A_1$ and $A_2$ from 5:1 to 1:5. For activity ratios not equal to one, larger percentage errors occur in estimates of the smaller of the two activities.

### 3.5.4 Uncertainty of Position

This section discusses the uncertainty in $A_1$ and $A_2$ due to the errors in the measurements of s, the separation between the two striata, and the depths $d_1$ and $d_2$ of the striata. The total thickness of T is assumed to be constant and expressed as

$$T = d_1 + d_2 + s\,. \tag{3.43}$$

With T held constant, an error in one of the parameters will result in errors in one or both of the other parameters. The error analysis in this section exploits this relationship between s, $d_1$, and $d_2$.

The fractional uncertainty in $A_1$ due to the uncertainty in the separation distance s is

$$\frac{\nabla A_1}{A_1} = -\left(1 + \frac{4e^{-2\mu s}}{1-e^{-2\mu s}} - \frac{2e^{-\mu s}}{r-e^{-\mu s}}\right) 2\mu\Delta s\,, \tag{3.44}$$

where $\Delta A_1/A_1$ is the fractional uncertainty; $s$ is the separation distance between the striata; $r$ is the ratio of the left and right measured specific-uptake activities; $\mu$ is the attenuation coefficient of the brain tissue; and $\Delta s$ is the uncertainty in $s$. A measurement of s with an error of plus or minus one millimeter (± 1 mm) results in an error in $A_1$ of less than 0.5% to about 10% for the values of r corresponding to activity ratios from 5:1 to 1:5.

The uncertainty in $A_2$ due to error in the measurement of separation distance s can be found by using the reciprocal value of r. The fractional uncertainty in $A_2$ due to the uncertainty in μ can be expressed as

$$\frac{\Delta A_2}{A_2} = -\left(1 + \frac{4e^{-2\mu s}}{1-e^{-2\mu s}} - \frac{2re^{-\mu s}}{1-re^{-\mu s}}\right) 2\mu\Delta s \,. \qquad (3.45)$$

A measurement of s with an error of plus or minus one millimeter (± 1 mm) results in an error in $A_2$ of less than 10% to about 0.5% for the values of r corresponding to activity ratios of $A_1$ and $A_2$ from 5:1 to 1:5.

The fractional uncertainty in $A_1$ due to an uncertainty in the $d_1$ measurement is

$$\frac{\Delta A_1}{A_1} = \left(1 + \frac{2e^{-2\mu s}}{1-e^{-2\mu s}}\right) \mu\Delta d_1 \,, \qquad (3.46)$$

where $\Delta A_1/A_1$ is the fractional uncertainty; $s$ is the separation distance between the striata; $\mu$ is the attenuation coefficient of the brain tissue; and $\Delta d_1$ is the uncertainty in $d_1$. The fractional uncertainty of $A_1$ due to error in the estimation of the position of $d_1$ is independent of r. A measurement of $d_1$ with an error of plus or minus one millimeter (± 1 mm) translates to approximately a 5% error in $A_1$.

The fractional uncertainty in $A_1$ due to an uncertainty in the $d_2$ measurement is

$$\frac{\Delta A_1}{A_1} = \left(\frac{1}{re^{\mu s} - 1} - \frac{e^{-2\mu s}}{1-e^{-2\mu s}}\right) 2\mu\Delta d_2 \,, \qquad (3.47)$$

where $\Delta A_1/A_1$ is the fractional uncertainty; $s$ is the separation distance between the striata; $r$ is the ratio of the left and right measured specific-uptake activities; $\mu$ is the attenuation coefficient of the brain tissue; and $\Delta d_2$ is the uncertainty in $d_2$. A measurement of $d_2$ with an error of plus or minus one millimeter (± 1 mm) results in an error in $A_1$ of about 1% to about 5% for the values of r corresponding to activity ratios from 5:1 to 1:5.

Due to the symmetry of the problem, the fractional uncertainty in $A_2$ due to measurement errors in $d_2$ is expressed as

$$\frac{\Delta A_2}{A_2} = \left(1 + \frac{2e^{-2\mu s}}{1 - e^{-2\mu s}}\right)\mu \Delta d_2 . \qquad (3.48)$$

The fractional uncertainty of $A_2$ due to error in the estimation of the position of $d_2$ is not dependent on the measured specific activities in the striatal regions, and thus, is independent of r. A measurement of $d_2$ with an error of plus or minus one millimeter (± 1 mm) results in about a 5% error in $A_2$ for activity ratios of $A_1$ and $A_2$ from 5:1 to 1:5.

Similarly, the fractional uncertainty in $A_2$ due to measurement errors in $d_1$ is expressed as

$$\frac{\Delta A_2}{A_2} = \left(\frac{1}{re^{\mu s} - 1} - \frac{e^{-2\mu s}}{1 - e^{-2\mu s}}\right) 2\mu \Delta d_1 . \qquad (3.49)$$

The fractional uncertainty in $A_2$ due to uncertainty in $d_1$ is dependent on r. A measurement of $d_2$ with an error of plus or minus one millimeter (± 1 mm) results in an

error in the $A_1$ of about 5% to about 25% for the values of r corresponding to activity ratios of $A_1$ and $A_2$ from 5:1 to 1:5.

Assuming $A_L$ and $A_R$ do not vary greatly over the striatal ROI, these fractional uncertainties are estimates of the fractional uncertainties in $U_1$ and $U_2$. The fractional uncertainties in $U_1$ and $U_2$ due to positioning error are summarized for the values used throughout this error analysis section in table 3.1. For activity ratios not equal to one, the larger percentage error is associated with the estimation of the smaller of the two activities.

The above error analysis indicates that reasonable accuracy can be achieved for the case of approximately equal uptakes. Estimates of the smaller of the two activities become increasingly less certain as the ratio between the two activity uptakes deviates from one. Table 3.2 lists all the sources of error discussed and gives estimates of the worst-case uncertainty to be excepted due to the assumptions used in this method.

Table 3.1 Positioning Errors

| Type and magnitude of positioning error | % Error in $U_1$, $U_2$ | | |
|---|---|---|---|
| | $U_1/U_2$ - 1 | $U_1/U_2$ - 2 | $U_1/U_2$ - 5 |
| ± 1mm error in separation $s$; $d_1$, $d_2$ constant | ±0.1%,±0.1% | ±1.3%,±2.4% | ±2.1%,±9.8% |
| ± 1mm error in depth $d_1$; $d_2$ constant | ±5.1%,±4.9% | ±5.1%,±9.9% | ±5.1%,±25% |
| ± 1mm error in depth $d_2$; $d_1$ constant | ±4.9%,±5.1% | ±2.5%,±5.1% | ±1.0%,±5.1% |

Table 3.2 Summary of Errors

| Source of error | Estimate of error | % Error in $U_1$, $U_2$ | | |
|---|---|---|---|---|
| | | $U_1/U_2$ - 1 | $U_1/U_2$ - 2 | $U_1/U_2$ - 5 |
| estimation of $\mu_b t_b$ | ±20% $\Rightarrow$ ±2.0% in $\delta A_L, \delta A_L$ | ← ±2.0%,±2.0% → | | |
| | $\Rightarrow$ ±2.5% in $\mu$ | ±1.7%,±1.7% | ±1.1%,±3.0% | ±0.7%,±6.7% |
| measurement of $T$ (± 2 mm) | ±2.0% $\Rightarrow$ ±2.0% in $\mu$ | ±1.4%,±1.4% | ±0.9%,±2.4% | ±0.6%,±5.3% |
| measurements of caudate positions, worst case error in depth $d_1$, ± 1mm; $d_2$ constant | | ±5.1%,±4.9% | ±5.1%,±9.9% | ±5.1%, ±25% |
| Total uncertainty due to parameter measurement and estimation errors | | ±10%, ±10% | ±9.1%,±17% | ±8.4%,±39% |

# Chapter 4

## PHANTOM EXPERIMENTS

Phantom studies are conducted to characterize the accuracy of conjugate imaging applied to the estimation of two activities in two aligned sources, embedded within a uniformly attenuating medium. A quantitative SPECT study is also conducted to compare the accuracy of current clinical SPECT to that of the conjugate imaging technique. In addition, the sum of the two activities are calculated and compared to the sum of the activities calculated by standard conjugate imaging. The ratio of activity concentrations in each source and surrounding medium are varied to simulate the striatal activity uptake associated with Parkinson's disease patients. The ratios of the activity uptake in the striata are 1:1, 2:1, and 5:1. The 1:1 ratio represents the activity uptake of a normal individual. The 2:1 ratio represents the activity uptake of a Parkinson's disease patient presenting clinical symptoms. The 5:1 ratio represents the activity uptake of a severe Parkinson's disease patient. Since the background activity concentration at the time of imaging is relatively low for the relevant radiopharmaceuticals (as discussed in chapter 4), the ratio of striata activity concentration and background concentration is assumed and modeled to be 9:9:1 for the 1:1 striatal uptake ratio, 12:6:1 for the 2:1 striatal uptake ratio, and 15:3:1 for the 5:1 striatal uptake ratio. For these studies the source with the highest activity concentration is the left sphere and the source with the lower activity

concentration is the right sphere. A study is also performed with no background activity; the ratio of the two source activities is 5:1.

Although most radiopharmaceuticals used in imaging the dopaminergic system are tagged with $^{123}I$, $^{99m}Tc$ pertechnetate is used in the studies. $^{99m}Tc$ pertechnetate is chosen because $^{99m}Tc$ photon emission spectrum is not as complex as that of $^{123}I$. The high-energy photon emissions of $^{123}I$ complicate quantitative imaging calculations by introducing downscatter contributions to the photopeak of interest. Thus, foundational experimental assessment of the mathematical model presented in Chapter 3 is initiated with $^{99m}Tc$. Although part of the motivation for the use of $^{99m}Tc$ is its less complex photon emission spectrum, $^{99m}Tc$ is clinically relevant for dopaminergic studies as $^{99m}Tc$ TRODAT is used in the evaluation of striatal dopamine in Parkinson's disease studies.

## 4.1 Methods

### 4.1.1 Conjugate Imaging

#### *4.1.1.1 Equipment*

*Imaging System*. A Marconi IRIX triple-head gamma camera system is used for image data acquisition. Heads II and III are used to acquire conjugate image data. Heads II and III are positioned 34 cm apart at 180º separation and are equipped with low-energy high-resolution (LEHR) collimators. A 15% energy window is placed symmetrically about the 140 keV $^{99m}Tc$ photopeak. Images are acquired as 512 pixels x 512 pixels matrices with 1.18 mm x 1.18 mm pixels.

*Phantom*. A cylindrical tank with two spherical inserts, representative of the brain with striata, is used. When radioactivity is placed in the spherical inserts and the tank in

quantities relative to the activity concentration ratios, this simple phantom models the specific activity uptake in the striata and background uptake in the brain. The phantom wall thickness is 0.635 cm (0.25”). The phantom inner height and inner diameter are 30.48 cm (12”) and 20.32 cm (8.0”), respectively. The outer volume of each sphere is 16.2 ml. The spheres were separated by 10.16 cm (4”).

*Flood/Transmission Source*. A rectangular tank is used as the calibration flood and as the transmission source. Its inner dimensions are 58.75 cm x 43.0 cm x 2.54 cm. Self-attenuation of the flood source is accounted for by comparing the count rates of activity in a small syringe to the count rates of the same activity dispensed in the water-filled flood. The small syringe represents a source with negligible self-attenuation. The count rates are normalized to an experiment start time and the acquired data were decay corrected. The count rates from the syringe and the flood are determined from 256 pixels x 256 pixels images. Due to the fact that the physical dimensions of the flood image are larger than the 256 pixels x 256 pixels image, the activity imaged is a fraction of the total activity in the flood source. The pixel to flood size ratio is calculated and multiplied by the total number of pixels used (256 x 256) to determine the source fraction – the percentage of the flood activity in the 256 pixel x 256 pixel area. The count rate from the syringe is divided into the flood count rate scaled by the source fraction. The flood source self-attenuation factor is thus measured to be 85.3%.

#### *4.1.1.2 Activity Concentrations*

A weighing technique is used in the dispensing of the $^{99m}$Tc pertechnetate solution into the spheres and phantom to attain the desired ratios. A pre-weighed tuberculin

syringe is filled with Tc-99m pertechnetate solution (~1.0 ml). The total activity (~4.5 mCi) is measured in a dose calibrator. Portions are dispensed by weight into the flood (~2.5 mCi), cylindrical tank (~1.0 mCi), and an additional volume of water (~25 ml). The further dilution of the solution is required to dispense more accurately much smaller amounts of activity (~5 to 30 μCi) into the spheres. After weighing the diluted activity, its activity concentration is calculated, and another syringe is weighed and filled. Portions of diluted solution are then dispensed by weight into the spheres. An analytic scale with better than 0.1 mg accuracy is used, resulting in better than 1% accuracy in this process of dividing the initial activity. Such accuracy is not achievable by separate dose-calibrator measurements of each quantity dispensed; basic accuracy and linearity of dose calibrators is typically no better than 2% within a single range, and is worse between ranges. The measurement of activities in different volumes can also result in inaccuracies due to different self-absorption and source-detector geometries.

#### *4.1.1.3 Data Acquisition*

The flood data are acquired for 30 minutes. The left and right transmission/emission data are acquired for 15 minutes each and the emission data for 15 minutes. Imaging times are adjusted to compensate approximately for decay; these adjustments ensured that all image data are approximately equivalent to that which would have resulted if all imaging had commenced at the same time.

Each data set requires a different imaging geometry. For the collection of flood data, the flood source is positioned midway between the cameras. For emission data acquisition, the phantom is placed midway between the cameras. When transmission data

are acquired by camera head II, the flood source is placed between the phantom and camera head III. For transmission data acquisition by camera head III, the flood source is placed between the phantom and camera head II. Figure 4.1 illustrates the experimental set-ups. Figure 4.2 shows transmission image acquisition on head III.

#### *4.1.1.4 Data Processing*

Software is developed in MATLAB to perform calculations for conjugate imaging of two aligned volumes and standard conjugate imaging. The code processes the image data and calculates the effective attenuation coefficient $\mu$, the background activity concentration B, the activities above background in each of the two volumes $A_1$ and $A_2$, and the sum of the activities above background $A_T$. The data are decay-corrected and normalized for acquisition times and durations. This converts the data into count rates at a common calibration time. All images acquired with head II are flipped horizontally for processing so that corresponding pixels in the opposing views coincided. The camera sensitivities are then calculated from the flood images. Emission and transmission rates are corrected for cylinder wall attenuation using a measured wall attenuation coefficient, $\mu_b$ (~0.118 $cm^{-1}$). The emission rates are subtracted from the transmission/emission rates to yield transmission rates. Due to the magnitude of the statistical fluctuations in the transmission data, the effective attenuation coefficient, $\mu$, is determined using the fractional flood transmission averaged over a 37 pixel x 37 pixel source region of interest (ROI) centered on the source activities' projections. The effective background activity is determined by averaging emissions over a 37 pixel x 37 pixel background ROI. The source activities above background are then calculated and summed over the source ROI.

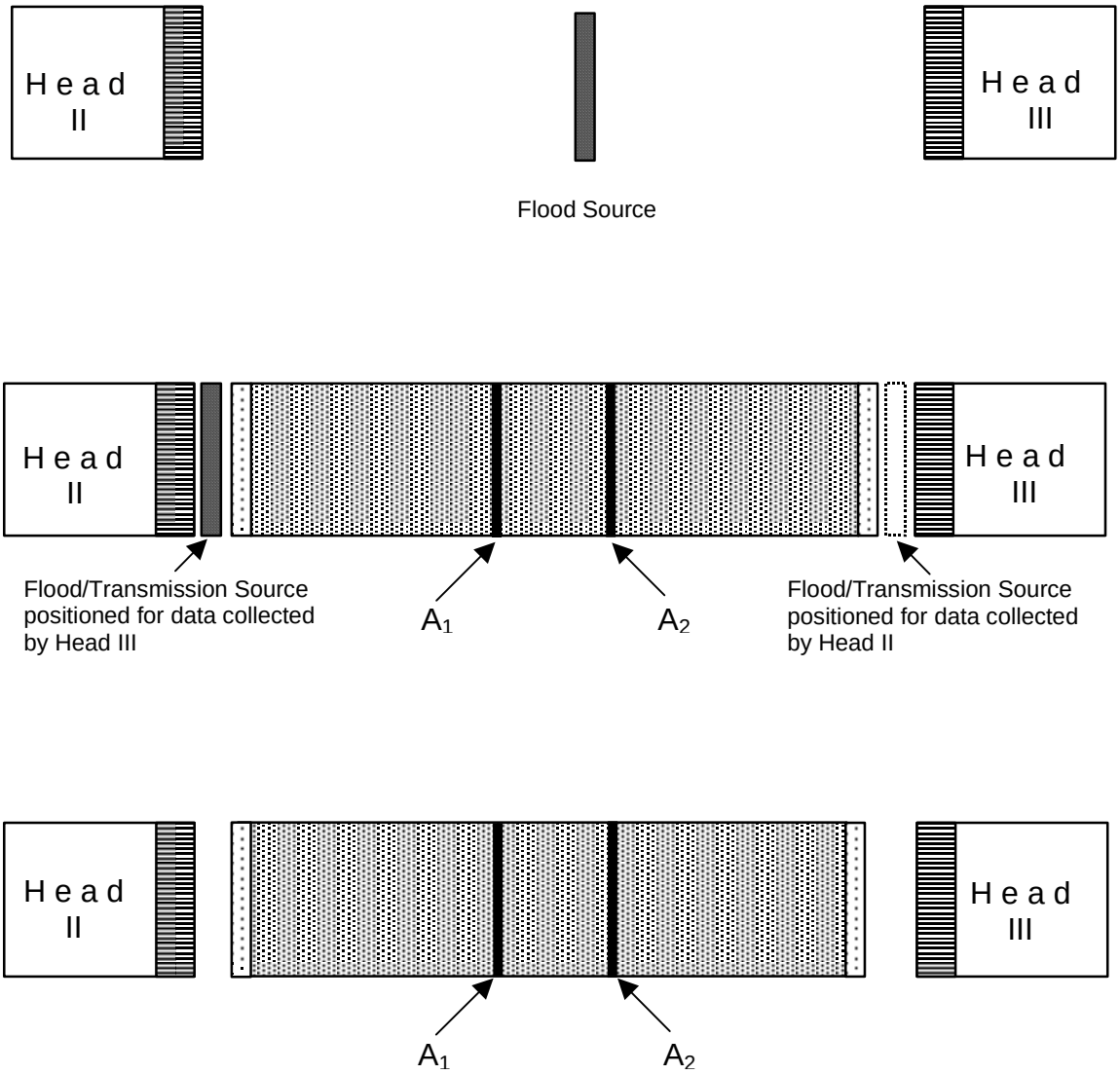



Figure 4.1. Experimental set-up. The top figure illustrates the acquisition of flood data, which are used to determine the cameras' sensitivities. The middle figure illustrates the acquisition of transmission data, which are used to determine the effective attenuation coefficient. The bottom figure illustrates acquisition of the emission data, which are used to determine the activity uptakes $A_1$ and $A_2$.

Figure 4.2. The transmission data acquisition set-up. Shown are the cylinder-with-two-spheres phantom, the flood/transmission source, and the gamma camera system used in the experiments. The configuration shown is specifically that used to obtain transmission/emission image data from head III; the transmission/emission left data are acquired similarly, except the flood is on the right side of the phantom rather than the left. Flood data are acquired with the cylindrical phantom removed and the flood/transmission source centered between the two cameras. The emission data are acquired with the cylindrical phantom centered between heads II and III.

The background activity concentration is determined by correcting the effective background activity per pixel for self-attenuation and dividing by T and the pixel area. Figure 4.3 shows flood, transmission/emission and transmission image maps.

The sum of the activities of the aligned volumes is estimated by summing the two estimates obtained from the above-outlined computations. The sum of the activities is also determined by applying a standard conjugate imaging analysis. In the case of two sources separated by a sufficiently large distance, the conjugate imaging calculations are modified to include a correction factor that accounts for the large distance. If the modifications are not made, the sum of the two activities would be overestimated. The correction factor depends on the product of the effective attenuation coefficient $\mu_{eff}$ and the distance between the volumes s and the ratio of the activities of the sources. Since the ratio is not known a priori, it is estimated by computing the ratio of the estimated source activities.

### 4.1.2 Quantitative SPECT

Two quantitative SPECT studies are performed. For the scope of this work, quantitative SPECT studies include attenuation correction and exclude scatter correction. This approach is used because most current clinical SPECT studies are not performed using scatter correction techniques. The two SPECT studies are performed with no background activity and a spheres activities ratio of 5:1. The results of these studies are compared to the conjugate imaging study performed with no background activity and a 5:1 spheres activities ratio.

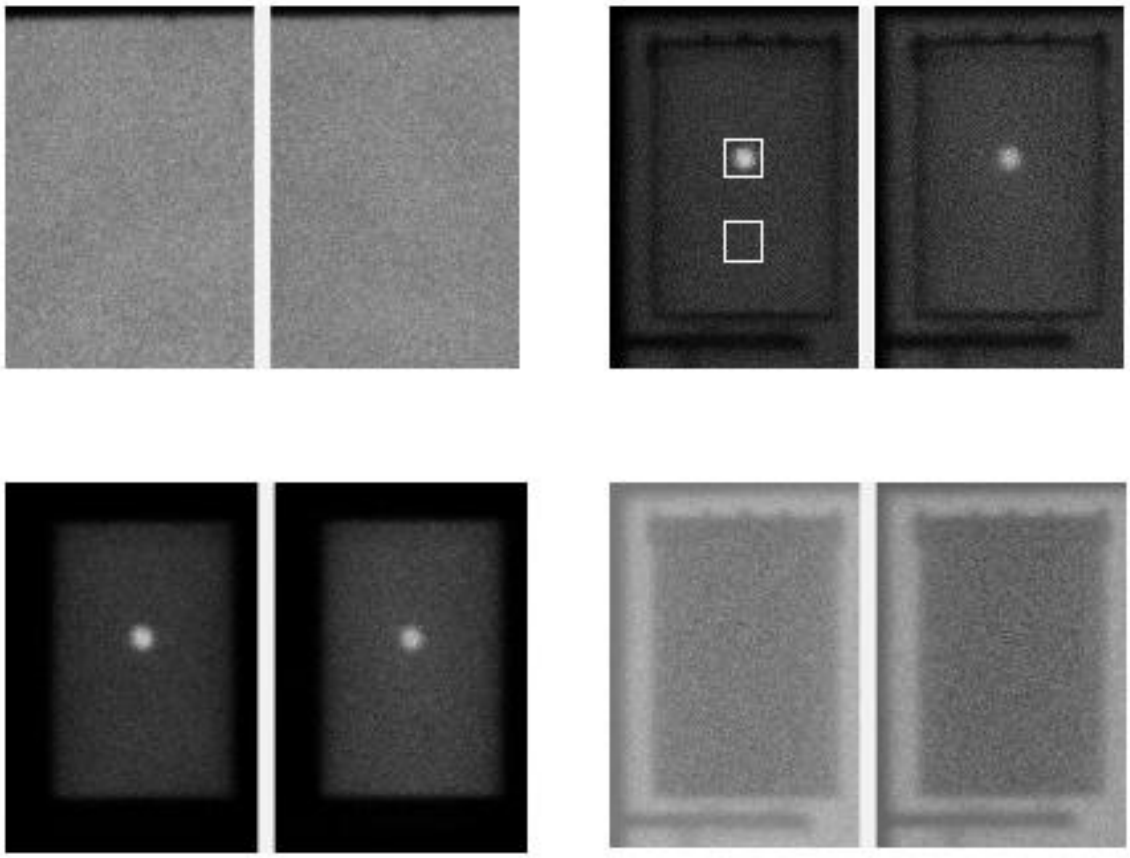


Figure 4.3. Examples of flood, transmission/emission, emission, and transmission activity maps for heads II and III. The maps shown represent a region that covers the entire phantom. The white squares are representative of the source and background ROIs used in the computations. Flood activity maps (upper left). Transmission/emission activity maps (upper right). Emission activity maps (lower left). Transmission activity maps (lower right).

#### *4.1.2.1 Equipment*

*Imaging System*. The Marconi IRIX triple-head gamma camera system is used for SPECT data acquisition. Heads I, II, and III are used. They are separated by 120º. Each camera head is equipped with a LEHR collimator. A 15 % energy window is placed symmetrically about the 140 keV $^{99m}$Tc- photopeak. Images were acquired as 128 x128 matrices with 4.72 mm x 4.72 mm pixels.

*Phantom*. The phantom used in the conjugate imaging study is used in the quantitative SPECT study. The reader is referred to the section 4.1.1.1 for a detailed description of the phantom.

#### *4.1.2.2 Activity Concentrations*

The weighing technique used in the conjugate imaging study to dispense the activity is used in the quantitative SPECT study as well. The reader is referred to section 4.1.1.2 for a detailed description of the weighing technique.

#### *4.1.2.3 Data Acquisition*

SPECT acquisition on the Marconi system involves a two-step process – emission and transmission acquisition. Transmission acquisition is performed for attenuation correction. The transmission scan is performed in two parts. The phantom is placed on the IRIX patient bed for the emission acquisition and for the first transmission acquisition. The phantom is removed from the field of view during a blank scan, the second transmission scan. The transmission and emission scans of the phantom also

includes the imaging of a point source of known activity, a calibration source for use in the quantitative analysis of the SPECT data.

The emission data are acquired with a continuous circular orbit with 120 projections per head over 360° at 1° per step and 8 seconds per stop. The Marconi IRIX system is equipped with BEACON attenuation-correction technology. This attenuation-correction technology uses two10 mCi Ba-133 emission sources, with primary emission 356 keV. The first transmission scan is performed with camera heads I and II and the Ba-133 transmission sources. The data are acquired with a step-and-shoot circular orbit with 180 projections per head over 360° at 1° per step and 6 seconds per stop. The second scan is a static, blank, calibration scan of 5-minute acquisition. Camera heads I and II are used.

#### *4.1.2.4 Data Processing*

The collected SPECT data are processed into three data sets. These data sets are (1) filtered non-attenuation-corrected data (Filtered Non-AC), (2) filtered attenuation-corrected data (Filtered AC), and (3) non-filtered attenuation-corrected data (Non-Filtered AC). Filtered Non-AC data are reconstructed using ordered subsets maximum likelihood expectation maximization (OSEM) and post-filtered with the default smoothing filter. Attenuation correction is not applied. Filtered AC data are reconstructed using OSEM, corrected for attenuation, and post-filtered with the default smoothing filter. Non-Filtered AC data are reconstructed with OSEM and corrected for attenuation. No post-filtered is performed on Non-Filtered AC data. The activity in each sphere is determined by comparing the calibration source count information. ROIs are placed about the calibration source and the two spherical sources on image slices in which the sources

are visible. The size of the ROIs changes with each slice to account for the spherical volume of the sources. In other words, for each slice of the spherical volume, the circle representing a slice of the volume changes in size with the largest circle being defined halfway through the volume. The total counts for each sphere are determined by adding the counts in the ROIs from the slices. For the first SPECT study, a total of 15 projections are used for each sphere. For the second SPECT study, 16 projections are used for each sphere. The total counts from the calibration source are divided by the activity in the calibration sphere at the time of the study to estimate counts per unit activity. The total counts for each spherical source is divided by the counts per unit activity to determine the activity amount in each sphere.

## 4.2 Results

### 4.2.1 Conjugate Imaging

As previously mentioned, the left sphere contained more activity than the right sphere for activity uptake ratios not equal to one. Tables 4.1, 4.2, and 4.3 display the calculated estimates and corresponding percent errors for the uptake ratio studies that included background activity. Table 4.1 displays the effective attenuation coefficient and the estimated background activity concentration for each experiment. Table 4.2 shows the estimated activities in the left and right spheres. The estimates in these two tables are determined using the conjugate imaging algorithm for two aligned sources. Table 4.3 shows the sums of the estimated left and right activities listed in Table 4.2 and shows the estimates of the total activity as computed using the standard conjugate algorithm

Table 4.1. Effective Attenuation Coefficient and Background Activity Concentration

| Nominal Ratio | Effective Attenuation Coefficient $\mu_{eff}$ ($cm^{-1}$) | Background Activity Concentration ($\mu$Ci/cc) | %Error Background Activity Concentration |
|---|---|---|---|
| 1:1 | 0.122 | 0.118 | + 13.5 |
| 2:1 | 0.117 | 0.119 | + 10.7 |
| 5:1 | 0.121 | 0.130 | + 13.0 |
| 1:5 | 0.128 | 0.135 | + 17.4 |

Table 4.2. Estimated Above Background Activity in Left and Right Spheres

| Nominal Ratio | Left Sphere Above-Background Activity ($\mu$Ci) | % Error Left Sphere Above -Background Activity | Right Sphere Above-Background Activity ($\mu$Ci) | % Error Right Sphere Above -Background Activity |
|---|---|---|---|---|
| 1:1 | 16.0 | + 11.1 | 14.0 | + 2.2 |
| 2:1 | 20.7 | + 2.5 | 8.14 | - 12.8 |
| 5:1 | 31.8 | + 8.2 | 3.21 | - 28.0 |
| 1:5 | 4.62 | + 3.6 | 33.0 | + 12.2 |

Table 4.3. Sum of Estimated Above Background Activities and Estimated Total Activity

| Nominal Ratio | Left Sphere Plus Right Sphere Activity | % Error Left Sphere Plus Right Sphere Activity | (Corrected) Classic Conjugate Total Activity ($\mu$Ci) | % Error (Corrected) Classic Conjugate Total Activity |
|---|---|---|---|---|
| 1:1 | 30.0 | + 6.8 | 28.6 | + 1.8 |
| 2:1 | 28.8 | + 2.3 | 26.9 | - 8.2 |
| 5:1 | 35.0 | + 3.4 | 30.5 | - 9.9 |
| 1:5 | 37.6 | + 11.1 | 32.8 | - 3.1 |

corrected for source separation. Standard conjugate imaging calculations, corrected for the separation of the two spheres, are used to estimate the sum of the two activities. The results of this computation are compared to the sum of the estimated source activities calculated from the modified conjugate technique. Corrected standard conjugate calculations yield total activity values within 10%. Total activities obtained by summing the estimates of source activities computed using modified conjugate calculations are within 11.1%.

Tables 4.4, 4.5, and 4.6 display the calculated estimates and percent errors for the uptake ratio studies that did not include background activity. Table 4.4 displays the calculated effective attenuation coefficient and calculated background activity concentration. Table 4.5 shows the estimated above background activity in the left and right spheres and associated percent errors. Table 4.6 compares the total activity estimates calculated from summing the individual activity estimates and calculated from the classic conjugate imaging technique with separation correction. Also listed in table 4.6 is the percent error associated with the classic imaging technique.

Table 4.4. No Background Activity Study: Estimates of Effective Attenuation Coefficient and Background Activity Concentration

| Nominal Ratio | Effective Attenuation Coefficient $\mu_{eff}$ ($cm^{-1}$) | Background Activity Concentration ($\mu$Ci/cc) |
|---|---|---|
| 5:1 * | 0.127 | 0.003 |
| 5:1** | 0.123 | 0.005 |

* No ambient background subtraction
** Ambient background subtraction

Table 4.5. No Background Activity Study Estimated Above Background Activity in Left and Right Spheres

| Nominal Ratio | Left Sphere Above-Background Activity (μCi) | % Error Left Sphere Above -Background Activity | Right Sphere Above-Background Activity (μCi) | % Error Right Sphere Above -Background Activity |
|---|---|---|---|---|
| 5:1* | 34.0 | + 14.6 | 4.3 | - 30.3 |
| 5:1** | 33.3 | + 12.2 | 3.6 | - 42.1 |

* No ambient background subtraction
** Ambient background subtraction

Table 4.6. No Background Activity Study
Sum of Estimated Above Background Activities and Estimated Total Activity

| Nominal Ratio | Left Sphere Plus Right Sphere Activity | % Error Left Sphere Plus Right Sphere Activity | (Corrected) Classic Conjugate Total Activity (μCi) | % Error (Corrected) Classic Conjugate Total Activity |
|---|---|---|---|---|
| 5:1 | 38.3 | + 6.7 | 34.5 | - 3.9 |
| 5:1 | 36.9 | + 2.8 | 33.1 | - 7.8 |

* No ambient background subtraction
** Ambient background subtraction

### 4.2.2 Quantitative SPECT Study

As with the conjugate imaging study, the left sphere contains more activity than the right sphere for activity uptake ratios not equal to one. The Filtered Non-AC SPECT data underestimate the activity in the left sphere by about 70% in both SPECT studies. The activity in the right sphere is underestimated by about 73% and 74% using Filtered Non-AC SPECT data in SPECT studies 1 and 2, respectively. In SPECT study 1, the

Filtered AC SPECT data overestimate the activity in each sphere by about 12%. In SPECT study 2, the Filtered AC SPECT data overestimate the activity in the left sphere by about 11% and overestimates the activity in the right sphere by 10%. In SPECT study 1, the Non-Filtered AC SPECT data overestimate the activity in the left sphere by about 12% and overestimate the activity in the right sphere by about 16%. In SPECT study 2, the Non-Filtered AC SPECT data overestimate the activity in the left sphere by about 11% and overestimate the activity in the right sphere by about 14%. Tables 4.7 and 4.8 display the percent error for the three sets of data for SPECT studies 1 and 2.

Table 4.7. Percent Errors for quantitative SPECT Studies I

| qSPECT 1 | | | | |
|---|---|---|---|---|
| Technique | Left Sphere Above-Background Activity (μCi) | % Error Left Sphere Above-Background Activity | Right Sphere Above-Background Activity (μCi) | % Error Right Sphere Above-Background Activity |
| Filtered Non-AC | 6.3 | -70.1 | 1.2 | -72.7 |
| Filtered AC | 23.6 | 11.6 | 4.9 | 11.6 |
| Non-Filtered AC | 23.7 | 12.4 | 5.2 | 16.4 |

Table 4.8. Percent Errors for quantitative SPECT Studies II

| qSPECT 2 | | | | |
|---|---|---|---|---|
| Technique | Left Sphere Above-Background Activity (μCi) | % Error Left Sphere Above-Background Activity | Right Sphere Above-Background Activity (μCi) | % Error Right Sphere Above-Background Activity |
| Filtered Non-AC | 5.4 | -70.4 | 1.0 | -73.8 |
| Filtered AC | 20.2 | 10.8 | 4.2 | 9.7 |
| Non-Filtered AC | 20.2 | 11.2 | 4.3 | 14.2 |

## 4.3 Discussion

This phantom study is conducted to evaluate the application of a conjugate imaging technique to the estimation of activity in each of two aligned sources. Four conjugate imaging experiments are conducted using three different source-to-source ratios (nominal ratio values were 1:1, 2:1, and 5:1). Estimates of the source activities and the sums of the two activities are determined. Tables 4.1 – 4.6 summarize the results. The values in the tables associated with the nominal ratio 1:5 are the result of an extension of the experiment involving the 5:1 ratio.

The effective attenuation coefficient for each experiment is determined and used in estimation of the background concentration and the source activities. The estimates of the background concentrations are all overestimates (10.7% to 17.4%). Some statistical errors due to transmission maps with relatively low counts might be expected, but there may also be a systematic component to the error contributing to an overestimation of the effective attenuation coefficient.

Most of the estimates of the activities in the left and right spheres are within 13% of the known values. The 5:1 experiment resulted in a 28% underestimation of the smaller of the two sphere activities. An extension of this experiment is conducted to initiate investigation into the source of this error. The spheres used in the 5:1 experiment, together with their activities, are switched by rotating the base, upon which the spheres are mounted. The base is rotated until the right sphere is occupying the position of the left sphere and the left sphere is occupying the position of the right. Since the activity uptake ratios assume the sphere in the left position to be the reference source, the activity uptake ratio for this experiment is 1:5. The 1:5 experiment results in overestimates of the two activities that are less than 13% (3.6% and 12.2%). Throughout the computations, the source depths and separation distances are assumed known. A possible contributor to the large underestimation of the smaller activity in the 5:1 experiment may be a property of the phantom. The two spheres used as the sources are mounted on rods extending into the water in the cylinder. It is assumed the sources are separated by 10.1 cm, the separation of the mounting holes. It is possible that the rods, when attached to the cylinder cover, are not sufficiently perpendicular to the cover and thus the sphere positions with respect to the cylinder center are not the same as those of the mounting holes. If this is the case, the assumed values for the source depths and separation could have been incorrect for one or more experiments. Theoretical error analysis suggests that the conjugate imaging computations are sensitive to the accuracy of these values. A small mis-positioning of the larger-activity sphere could cause a significant fractional error in the estimation of the activity in the smaller-activity sphere. To corroborate the theoretical error analysis, the position of the left sphere used in the conjugate imaging calculations is moved in ±1 mm

increments from it original position. The percent errors in the left and right activity estimations are calculated using each new source location. Since a mis-positioning error in the left sphere results in a bias between the percent errors for left and right activity estimates that increases with increasing activity uptake ratio, the left sphere is moved until the percent errors are relatively equal for all three ratios. It is estimated that the left sphere is approximately +3.6 mm from the putative position.

Most of the estimates computed using the data of the these experiments are very good estimates given that some of the raw data images are count limited and no scatter correction is performed. The phantom used is a cylinder with a relatively large diameter and not representative of typical human or primate head sizes. Imaging of a smaller phantom with less attenuation would be more realistic and result in higher count transmission/emission images and thus higher count transmission maps. All the data are collected at rates designed to keep camera dead time errors below 1%. This may not have been appropriate, as the reduced counts in the data may have produced errors greater than the errors that would have resulted if more dead time had been tolerated. The strength of the flood/transmission source is a parameter that needs additional investigation.

The quantitative SPECT study is performed to compare the conjugate imaging calculations to clinically feasible techniques. As with the conjugate imaging studies, the SPECT study is performed with no scatter correction. Currently, scatter correction algorithms are not used widely in clinical settings. Filtered attenuation corrected SPECT provides the best estimates out of the three quantitative SPECT studies. The activity estimates in the left and right spheres are within 12% for both filtered attenuation corrected SPECT studies. The filtered attenuation corrected SPECT study and the 1:5

conjugate imaging study, where the mis-positioning error was minimized provided comparable results. This suggests that conjugate imaging of the two aligned sources is comparable in accuracy to current clinical capabilities and is a reasonable quantitative technique for estimating activity uptake in two aligned sources.

# Chapter 5

## SHIELDING CONSIDERATIONS FOR A NOVEL DEDICATED SYSTEM

This chapter presents the design and characterization of the shielding requirements for a novel dedicated mobile nuclear medicine system (Matthews, Mintzer et al. 1997 2000). The system is to perform modified conjugate imaging of $^{123}$I and $^{99m}$Tc radiopharmaceuticals in the striata, and comprises two small field-of-view (FOV) gamma cameras mounted on a mobile gantry. The FOV of each gamma camera, determined by the size of its scintillation crystal, is 10 cm x 10 cm. The conjugate imaging system is designed such that its two gamma cameras are positioned on opposite sides of a subject's head. Figure 5.1 is a schematic of the system. Figure 5.2 is a photograph of the system gantry. The design of the gamma cameras, the amount of shielding, and the payload of the gantry are interdependent in the system development. Shielding optimization is an important part of the design and construction of any gamma camera system. A practical balance between the thickness and weight of the shielding is necessary. The shielding must sufficiently reduce the background counts in the scintillation crystal, and the weight of the shielding must be within the limits of the gantry payload. In addition, the shielding design must take into account the mobility of the system and the emission spectra of the radiopharmaceuticals to be used in studies conducted with the novel system.

As discussed in chapter 2, most of the single-photon emitting radiopharmaceuticals used to image the dopaminergic system in the striata are labeled with $^{123}$I. $^{123}$I radiopharmaceuticals also pool readily in organs in the torso, specifically

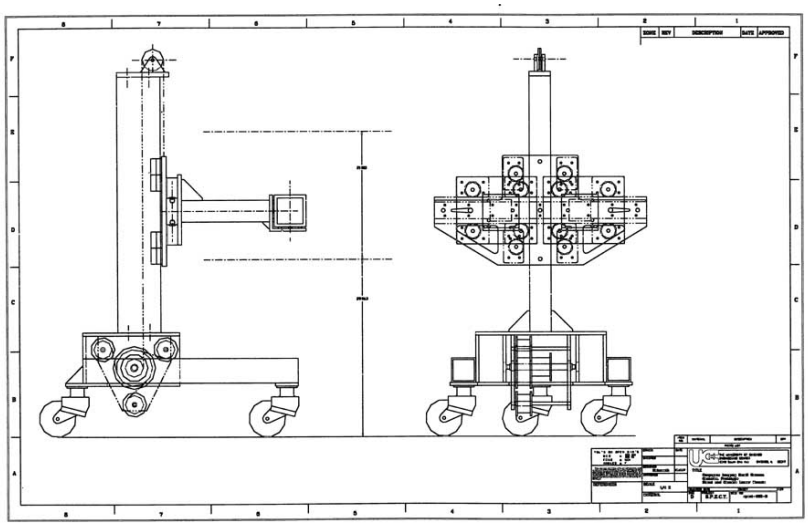


Figure 5.1. Schematic of gantry of mobile dedicated conjugate imaging system.

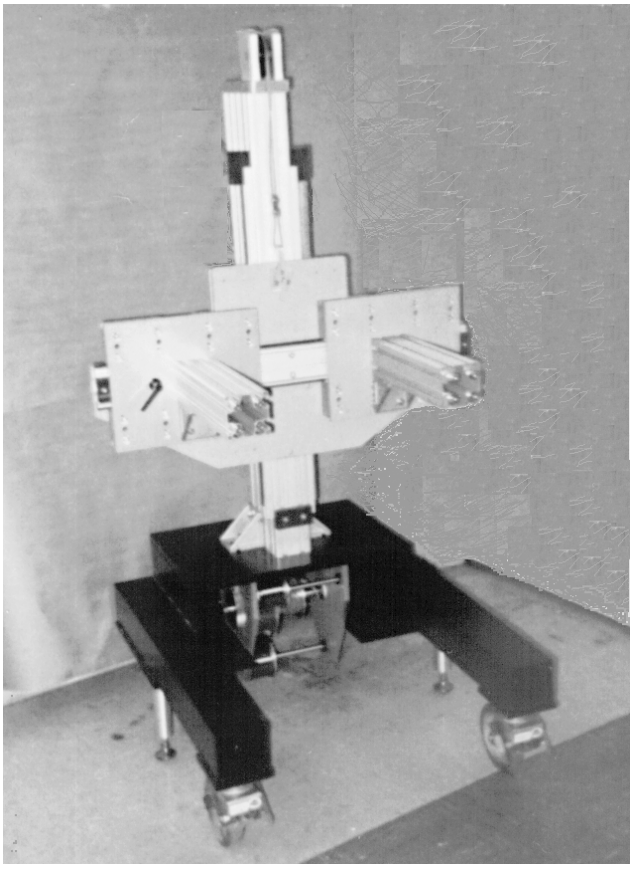


Figure 5.2. Photograph of conjugate imaging gantry.

the lung, liver, and certain organs in the gastrointestinal tract. This generates activity distributions outside the FOV of the camera. This out-of-FOV activity could reduce the accuracy in estimations of activity in the striata in quantitative studies using small FOV gamma cameras due to the high-energy photon emissions of $^{123}$I. Therefore, accurate quantification of focal uptake of $^{123}$I radiopharmaceuticals in the striata requires that downscatter contribute minimally to image data used for uptake estimation. Reduction of downscatter contribution can occur with sufficient detector shielding and/or data processing that compensates for these events.

In this chapter, we describe two Monte Carlo simulation studies performed to determine and characterize an appropriate shielding configuration for the small FOV gamma cameras comprising the novel system. The first simulation study is performed to determine a shielding design that adequately shields high-energy gamma emissions originating from outside the FOV and is within the weight limits for the mobile conjugate imaging system. The second simulation study is performed to characterize the distribution of events across the scintillation crystal due to high-energy gamma emissions that penetrate the selected shielding design and deposit energy in the 159 keV photopeak window.

## 5.1 Monte Carlo Simulations

The simulations are performed using Monte Carlo N-Particle Transport code, version 4c (MCNP-4c) (Briesmeister). The simulations are performed in MCNP's photon transport mode. In this mode, only photons are transported and tracked. Electrons are generated but not transported. The thick target bremsstrahlung model (TTB) is used to

manage electron and bremsstrahlung generation and transport. In the TTB model, electrons are generated but are assumed to travel in the same direction as that of the incident photon and deposit their energy locally. Bremsstrahlung photons that are produced by the electrons were transported (Briesmeister 2000). The photon interactions that occurred during transport are modeled in MCNP's detailed physics mode. In detailed physics mode, photoelectric absorption, Compton scattering, coherent scattering and pair production are modeled. Fluorescence photons are transported and photoelectrons are treated with the TTB model for photoelectric absorption. The binding energies of atomic electrons are accounted for in Compton scattering (incoherent scattering) (Briesmeister 2000).

The simulation set-up consists of a model primate and one small FOV camera with the face of its collimator located 1 cm from the primate's head. Figure 5.3 is an illustration of the set-up used in the simulations. The activity placed in the striata represent in-FOV activity, and the activity in GI tract, liver, and lungs represent out-of-FOV activity. Simulations of activity in GI tract, liver and lungs omit the 159 keV gamma emission because its penetration of the shielding is negligible. The primary photon emission and the high-energy gammas are emitted from the appropriate sources in proportions corresponding to the relative yields of the decays of $^{123}$I. To achieve acceptable statistical accuracy over most of the spectrum, with reasonable execution times, $1\times10^{8}$ source photons and $5\times10^{8}$ source photons are simulated and the results are recorded in tally bins of width 5-keV for the striatal sources and the lung and GIT sources, respectively.

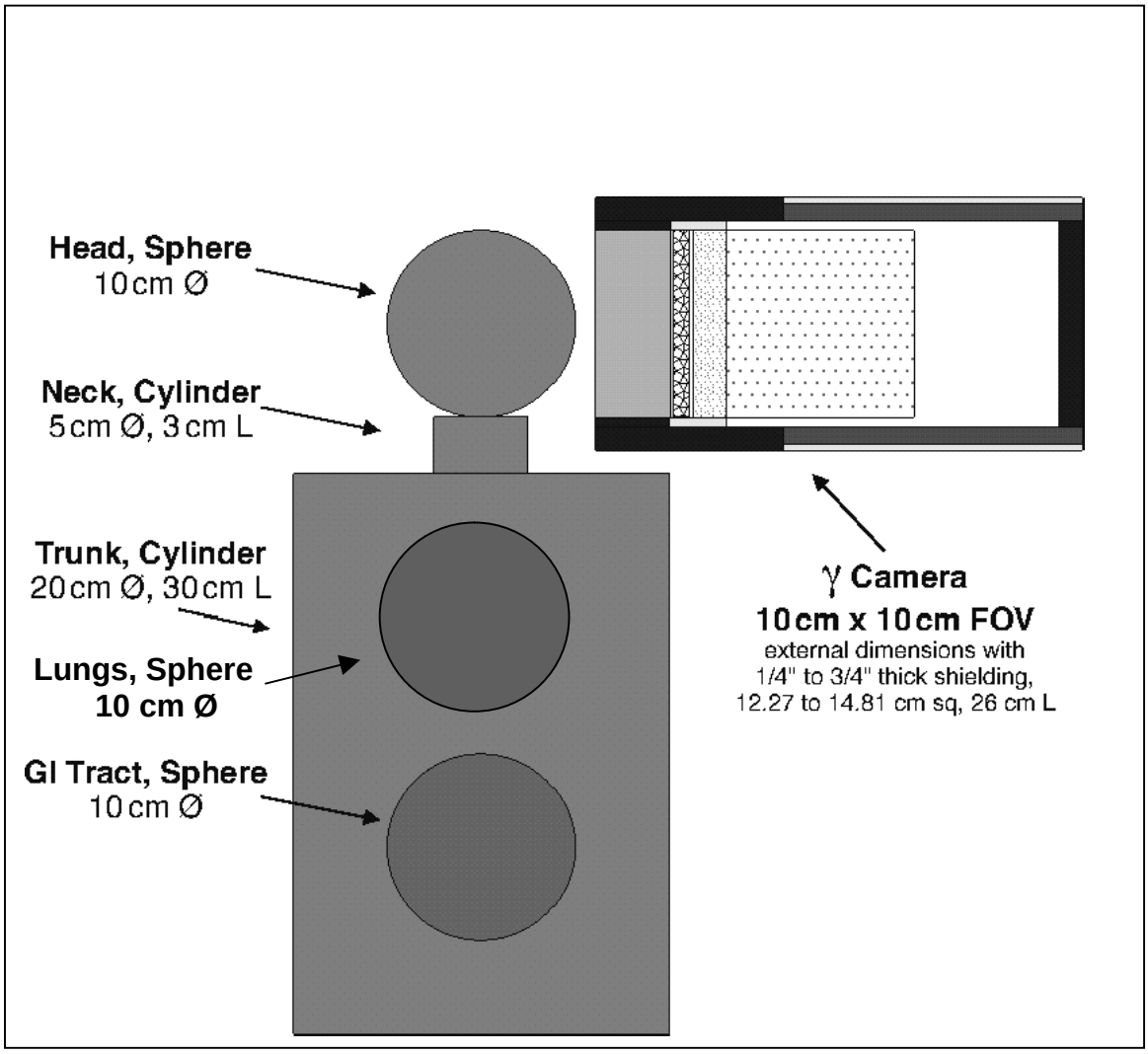


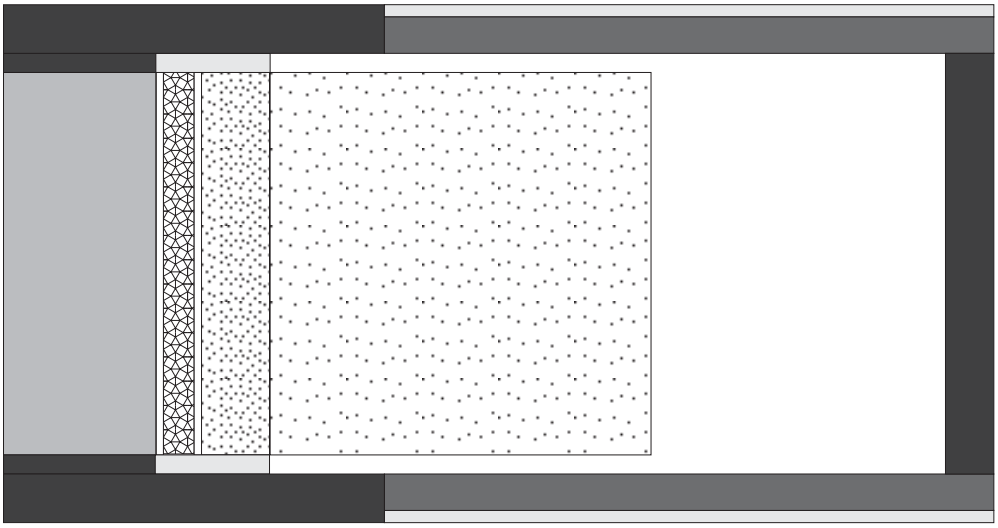

Figure 5.3. Configuration of idealized primate and camera used in the simulations. The primate was modeled using water-filled shapes as shown, representing tissue-equivalent material. The activity was uniformly distributed throughout the spherical volumes representing the GI tract, liver and lungs. The camera was positioned with the collimator face located 1 cm from the primate's head.

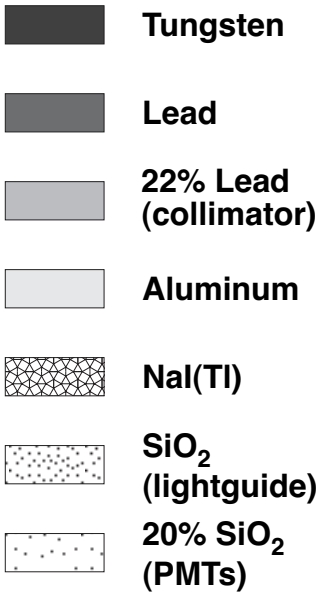
### 5.1.1 Primate Model

The system is to be used to image primates as well as humans. Thus, a primate is modeled for the simulations. The primate is modeled with water-filled shapes to represent tissue equivalent material. The primate model is shown in Figure 5.3. The water is uniformly distributed in each shape. The head is a 10-cm diameter sphere; the neck a 5-cm diameter, 3-cm long cylinder; and the torso a 20-cm diameter, 30-cm long cylinder. The striatal spheres have a 2 cm diameter and are symmetric about the vertical bisector of the head sphere. The centers of the spheres are 1 cm superior the center of the head and 3.56 cm apart. The GI tract and the liver are represented by a 10-cm diameter sphere placed in the torso with the center of the sphere 20 cm from the top of the torso. For this study, the GI tract is assumed to include only the large and small intestines; the oral cavity, the pharynx, the esophagus, and the stomach were excluded. The lung is represented as a 10 cm diameter sphere located in the upper half of the torso with the center of the sphere 7 cm from the top of the torso. The modeled primate has no extremities.

### 5.1.2 Camera Model

The camera simulated consists of a lead collimator, a quartz light guide, photomultiplier tubes (PMTs), and a NaI scintillation crystal all encased in walls of tungsten, lead, and aluminum. The length of the camera is 26.27 cm. Figure 5.4 is a diagram of the simulated camera. The camera is modeled after the small gamma cameras in a novel conjugate - system. Figure 5.5 is a photograph of such a gamma camera. Figure 5.6 is a schematic of a small gamma camera. The gamma cameras have a high resolution hexagonal collimator






**Configurations Simulated**

| | $T_W$ | $T_{Pb}$ | $T_{Al}$ |
|---|---|---|---|
| 1 | 1/4" | 1/4" | 0 |
| 2 | 3/8" | 1/4" | 1/8" |
| 3 | 3/8" | 3/8" | 0 |
| 4 | 1/2" | 3/8" | 1/8" |
| 5 | 3/4" | 5/8" | 1/8" |

Figure 5.4. Detailed diagram of idealized camera components. Thicknesses of tungsten, lead, and aluminum wall components used in each simulation are listed. Lead distributed uniformly at 22% density within the collimator volume modeled a typical low-energy high-resolution collimator. The PMTs were modeled with $SiO_2$ uniformly distributed at 20% density within a 10 cm x 10 cm x 10 cm volume.

with hole size of 1.9 mm, septa thickness of 0.25 mm, hole length of 40 mm, and sensitivity of 250 cpm/μCi. However, to ensure reasonable simulation execution times, a 4×10×10 cm 22%–density uniform lead distribution is used a small gamma camera. The gamma cameras have a high instead of a detailed collimator. The simulated NaI(Tl) scintillation crystal is 0.8 cm ×10 cm ×10 cm and positioned 0.2 cm behind the collimator to account for the presence of thin layers of material not modeled due to their low Z numbers. A 1.8-cm quartz light guide is placed 0.2 cm behind the NaI(Tl) crystal. The spacing is used to account for the presence of a thin layer of optical coupling compound between the light guide and crystal. The PMT glass envelopes are represented as a 10 cm ×10cm ×10 cm volume of $SiO_2$ with a uniform density of 0.6grams/$cm^3$.

Shielding for high-energy photons is composed usually of a highly dense material with a high atomic number (Z). The thickness of the shielding is inversely related to the material's Z number and density. The higher the Z number and density, the less shielding required. For the shielding design of the gamma cameras, tungsten and lead are used. Tungsten is used in the front half of the camera to provide shielding of the crystal. The back half of the camera is shielded with lead. Tungsten walls extended 10 cm along the length of the camera starting at the collimator face. These tungsten walls are intended to provide maximum practical shielding of the NaI(Tl) crystal. The back plate of the camera is tungsten. The remaining lateral shielding is lead with structural walls of aluminum.

Five different camera shielding configurations are simulated; each has different tungsten, lead, and aluminum wall thicknesses. Specifications of the configurations are

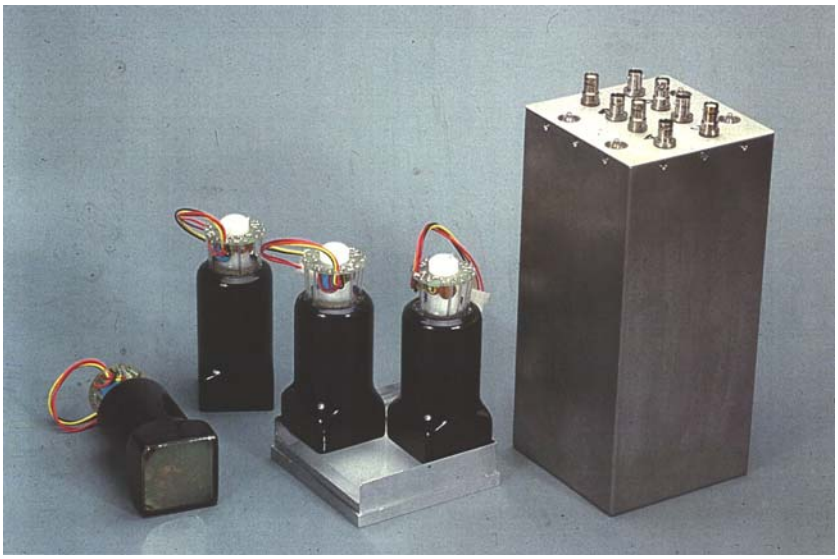


Figure 5.5. Small gamma camera for use in a novel dedicated conjugate imaging system. Photomultiplier tubes, scintillation crystal and collimator are shown next to the outer lead shielding.

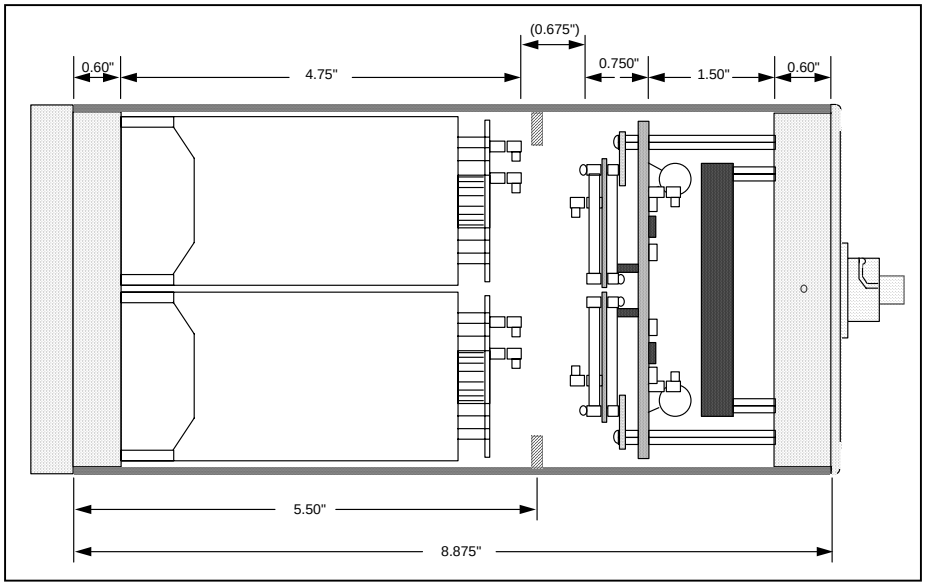



Figure 5.6. Cross-sectional schematic of small gamma camera for use in the dedicated conjugate imaging system. The collimator is shown in front of the 0.6" scintillation crystal. The crystal is followed by the PMTs, which is followed by the positioning circuitry.

shown in figure 5.4. The thickness of tungsten is increased in increments of ¼"from ¼" to ¾". Due to lead's lack of hardness, the effect of including aluminum structural walls in the shielding design is investigated. Aluminum walls of 1/8" thickness are included for structural support in shielding designs two, four, and five. For shielding designs including aluminum walls, the thickness of lead is dictated by the thickness of the tungsten shielding and the aluminum walls.

## 5.2 Shielding Determination

To evaluate the count contribution from out-of-FOV activity as a function of shielding design, three simulation studies are performed. One simulation study models and investigates the detection of 159 keV photon emissions from the striatal sources. A second simulation study models and investigates the detection of downscatter from with activity in the GI tract and the liver. The third simulation study models and investigates the detection of downscatter from activity in the lungs.

MCNP pulse-height tallies are collected to determine the event rates and the spectra of energy deposited in the NaI(Tl) crystal of the camera. The pulse-height tally results are fractions representing the number of energy-deposited events in each energy bin per source photon. Tallies are collected in 5 keV energy bins and a 20% energy window centered on 159 keV. These tallies are performed with and without MCNP's detector Gaussian energy broadening (GEB). Tallies performed without GEB record the energy as if deposited in an ideal detector. Tallies performed with GEB record the energy as if deposited in a detector with finite energy resolution. The camera simulated has 12%

energy resolution at full width at half maximum (FWHM) at 159 keV. The energy resolution of the simulated camera is a function of $E^{-1/2}$.

### 5.2.1 Data Analysis

The tallies collected in 5-keV bins are normalized by dividing by the bin size to yield plots of simulated pulse-height spectra. For ease of interpretation, the energy-window tallies of striata, GI tract, and lung activities are converted to tallies with units of cps/mCi. For the GI tract and lung results, the conversions include multiplication by $3.7\times10^7$ disintegrations/s/mCi and by 0.03 to reflect the fact that the emissions simulated represent only the 3% high-energy gamma emissions of $^{123}$I. The tally results from the striata simulations are multiplied by $3.7\times10^7$ disintegrations/s/mCi and by 83% to represent the yield of the primary photon emission. The cps/mCi of striatal activity and out-of-FOV activity is then multiplied by the corresponding fraction of activity uptake for each radiopharmaceutical to yield the counts per second of activity.

Preliminary data analysis performed on the GI tract tally data assume the activity uptake in the GI tract and striata is 10 mCi and 10 μCi, respectively (Jangha, Mintzer et al. 2001). For each camera configuration, the counts per second recorded in the 159 keV, 20% energy window as a result of the detection of scattered high-energy emissions from a 10mCi GI source is determined through simulation. The counts per second due to high-energy emissions is compared to the counts per second due to striatal activity. The counts per second in the 159 keV 20% window from 10 μCi in the striata is not simulated, but is calculated to be 12.5 counts per second (Jangha, Mintzer et al. 2001) It is determined that

the out-of-FOV activity increase the striata count rate by 3% - 28% for shielding configurations 1-5, respectively.

However, biodistribution studies have shown at the time of imaging, i.e. at biokinetic equilibrium, the total activity uptake in the lungs on average is 10 times greater than that in striata. The combined activity uptake in the liver and GI tract on average is 25 times greater than that in the striata (Seibyl, Wallace et al. 1994). Subsequently, a more accurate simulation is performed using activity uptake values typical for $^{123}$I radiopharmaceuticals used in striatal imaging studies and simulating striatal activity uptake and detection. Data analysis is performed on both GI and lung pulse-height tally data using activity uptake values typical of $^{123}$I β-CIT, $^{123}$I FP-CIT, and $^{123}$I IBZM. The activity uptake values are based on the administration of 5 mCi doses to healthy individuals (controls). Table 5.1 shows the percent uptake of the striata, GI tract, and lungs for an injection dose of 5 mCi of $^{123}$I β-CIT, $^{123}$I FP-CIT, and $^{123}$I IBZM, respectively. The last two columns in Table 5.1 are the percent uptakes of initial doses used to represent patients in the early (2:1) and late stages (5:1) of Parkinson's disease. These uptake ratios, which represent appropriate upper and lower bounds of ratios of activity uptake for Parkinson patients, are determined by subtracting the product of the percent dose for controls by the characteristic fractional loss of dopamine from the percent dose for controls. The reported fractional losses of dopamine in early- and late-stage Parkinson's disease patients are 50% and 75%, respectively (Marek, Seibly et al. 1996; Seibyl 2003). It is assumed that there was a direct linear relationship between the percent loss and activity uptake.

For each camera configuration, the counts per second recorded in the 159 keV,

Table 5.1 Percent Uptake of Initial Dose in Critical Organs

| Radiopharmaceutical | Controls | | | Parkinson's Patients | |
|---|---|---|---|---|---|
| | | | | Early Stage | Late Stage |
| | striata | lungs | GI tract/liver | striata | striata |
| **$^{123}$I β-CIT** | 2.0% | 21.0% | 52.0% | 1.0% | 0.5% |
| **$^{123}$I FP-CIT** | 0.8% | 9.0% | 18.0% | 0.4% | 0.2% |
| **$^{123}$I IBZM** | 1.7% | 8.12% | 27.5% | 0.8% | 0.4% |

20% energy window due to the detection of scattered high-energy emissions from GI activity and lung activity is determined. The count rates resultant from the GI activity and lung activity are added to determine the total count rate for out-of-FOV activity. The striatal count rate is determined in the159 keV, 20% energy window. The percent increase in the striatal count rate is determined for each radiopharmaceutical.

It is assumed that the counts in the 159 keV, 20% energy window collected from striatal activity are concentrated in the physical location of the striatal projection. Since each striatal source has a diameter of 2 cm, the projected lateral area of the spheres is approximately 3.14 $cm^2$. Therefore, it is assumed that the projected striatal region can be encompassed by a square 4 $cm^2$ ROI drawn on the image data. A 4 $cm^2$ ROI is 4 % of the FOV of the gamma cameras. To determine the out-of-FOV contribution to the rate of emissions detected in a 4 $cm^2$ region, the total count rate across the face of the crystal due to activity uptakes in the GI tract and lungs are multiplied by this area fraction. The percent increase in striatal counts due to these contributions is determined by dividing the

out of FOV counts by the striatal counts. The percent increase in striatal counts due to only GI tract activity and to only lung activity are also determined.

### 5.2.2 Results

The normalized pulse-height spectra without GEB pictured in figure 5.7 represent ideal detector resolution. The spectra with GEB pictured in figure 5.8 show the spectra of out-of-FOV shielding penetration events as would be detected by the small FOV gamma camera. The spectra show characteristic tungsten and lead fluorescence x-ray peaks. A broad backscatter peak around 180 keV due to scattered 529 keV gamma emissions can be seen.

Figures 5.9 –5.11 show the percent increases due to out-of-FOV activity for $^{123}$I β-CIT, $^{123}$I FP-CIT, and $^{123}$I IBZM, respectively. Although the percent increase increases as the activity uptake ratio increased (total striatal activity decreased), the magnitude of increase is less than 2% for all configurations and all radiopharmaceuticals.

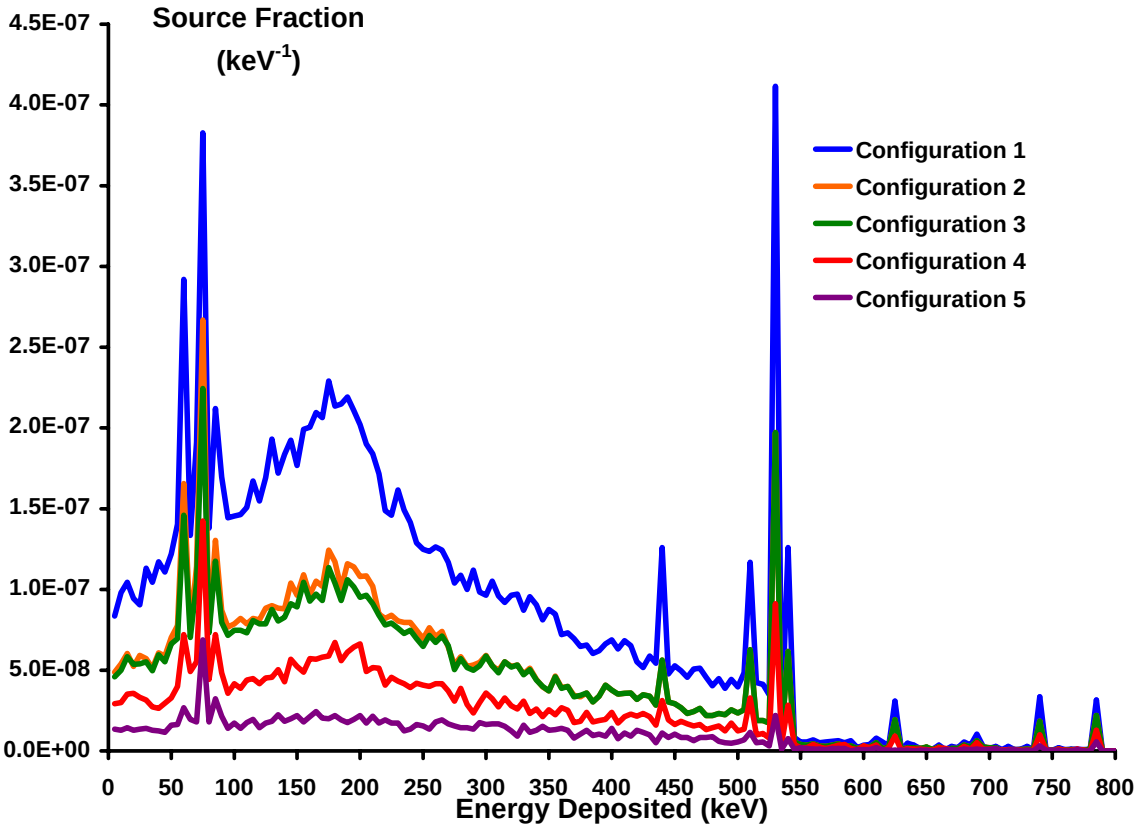



Figure 5.7. Pulse height spectrums as detected by ideal gamma camera. Pulse height spectrums from $^{123}$I high-energy photons emitted from the GI tract and liver as seen by an ideal gamma camera (gamma camera with perfect energy resolution). K-shell x-ray peaks for tungsten (~70 keV) and lead (~88 keV) are shown. The 173 keV backscatter peak due to the 529 keV photon is also clearly shown.

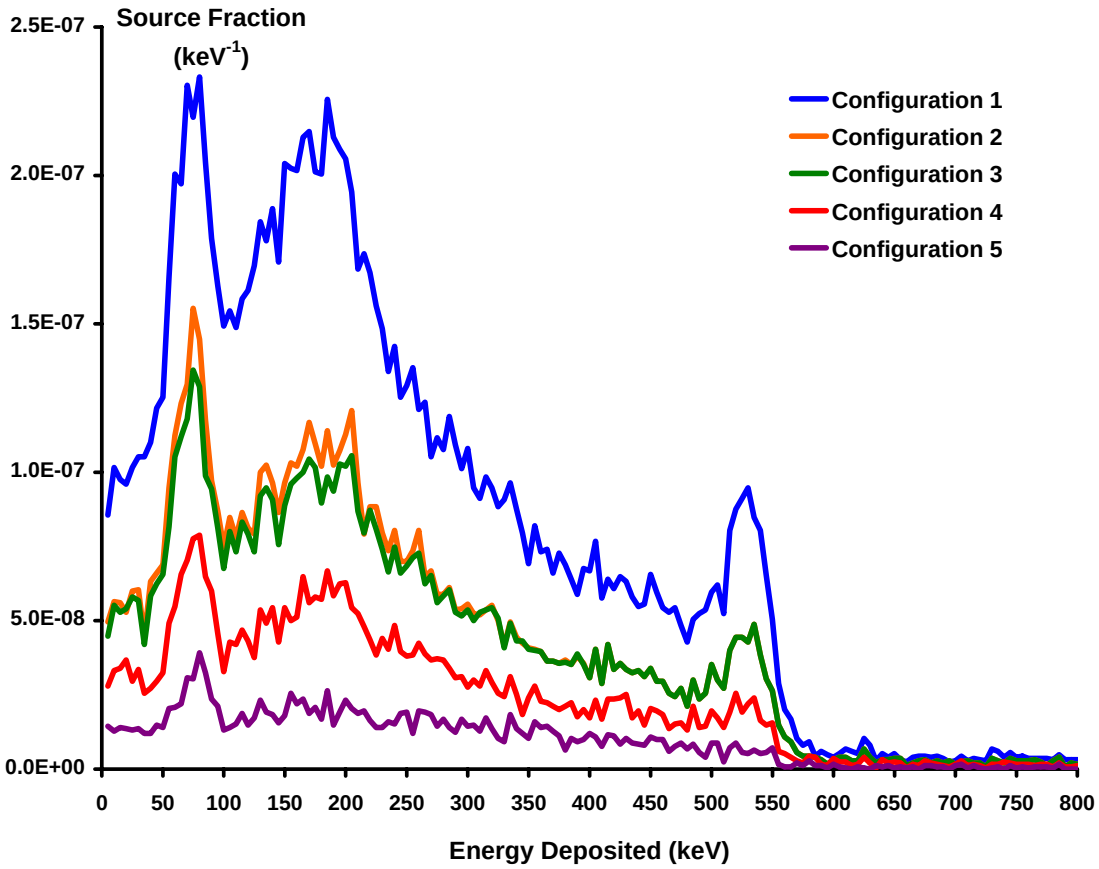



Figure 5.8. Pulse height spectrums as detected by a gamma camera with finite resolution. Pulse height spectrums from $^{123}$I high-energy photons emitted from the GI tract and liver as seen by a gamma camera with energy resolution of 12% at 159 keV. The iodine and tungsten fluorescence escape peaks that are clearly seen in figure 10.9 are not as clearly depicted. The backscatter peak for the 529 keV photon is also shown but not as clearly delineated as in figure 8.9. The soft peaks are due to finite energy resolution.

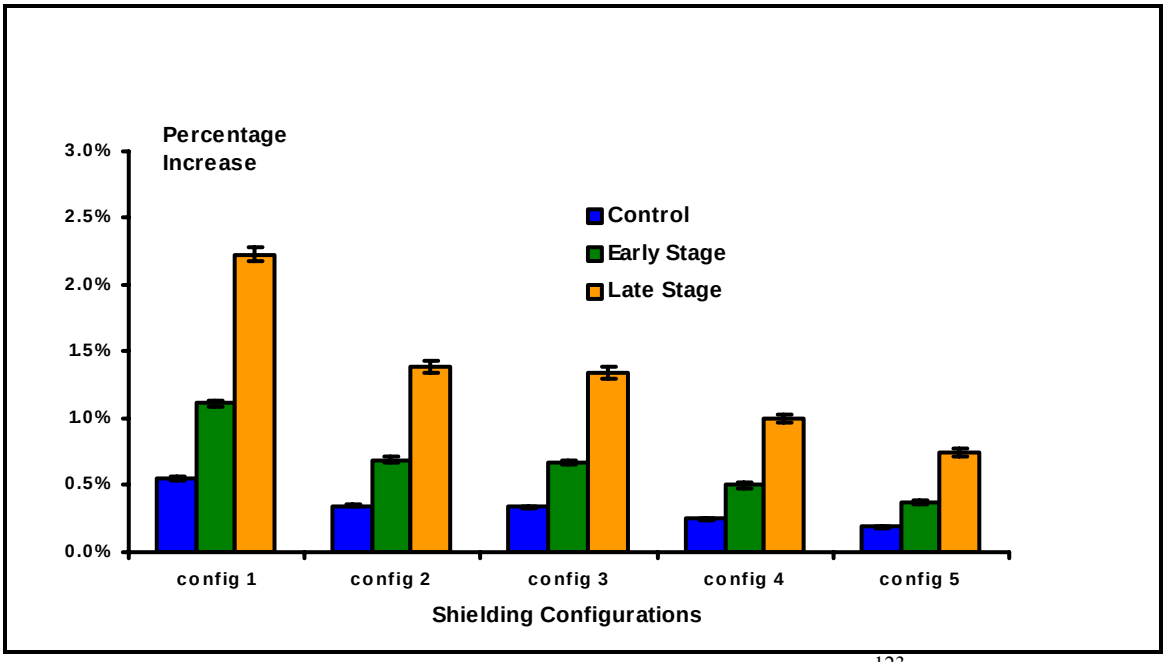



Figure 5.9. Comparison of percentage increase in striatal counts for $^{123}$I β-CIT activity uptakes in the striata of controls and early, stage, and late-stage Parkinson's disease patients. The controls are considered to have normal striatal activity. It can be seen that as activity uptake in the striata decreases the significance of out-of-FOV count contribution increases. The percent increase is across the entire scintillation crystal.

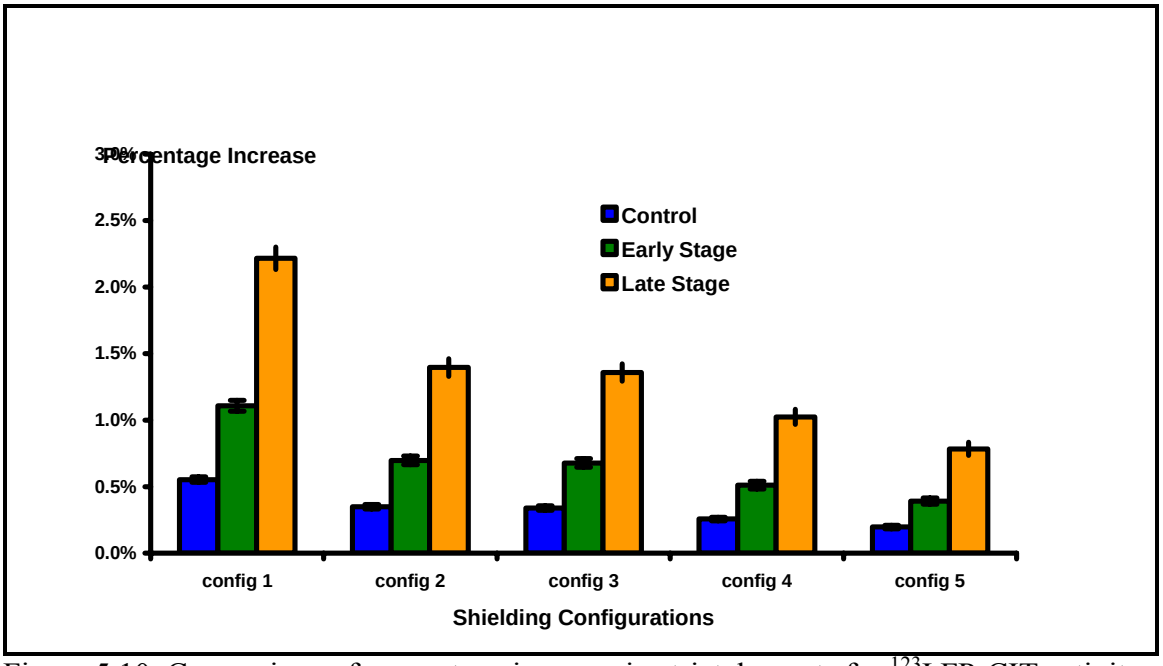



Figure 5.10. Comparison of percentage increase in striatal counts for $^{123}$I FP-CIT activity uptake in the striata of controls and early, stage, and late-stage Parkinson's disease patients. The controls are considered to have normal striatal activity. It can be seen that as activity uptake in the striata decreases the significance of out-of-FOV count contribution increases. The percent increase is across the entire scintillation crystal.

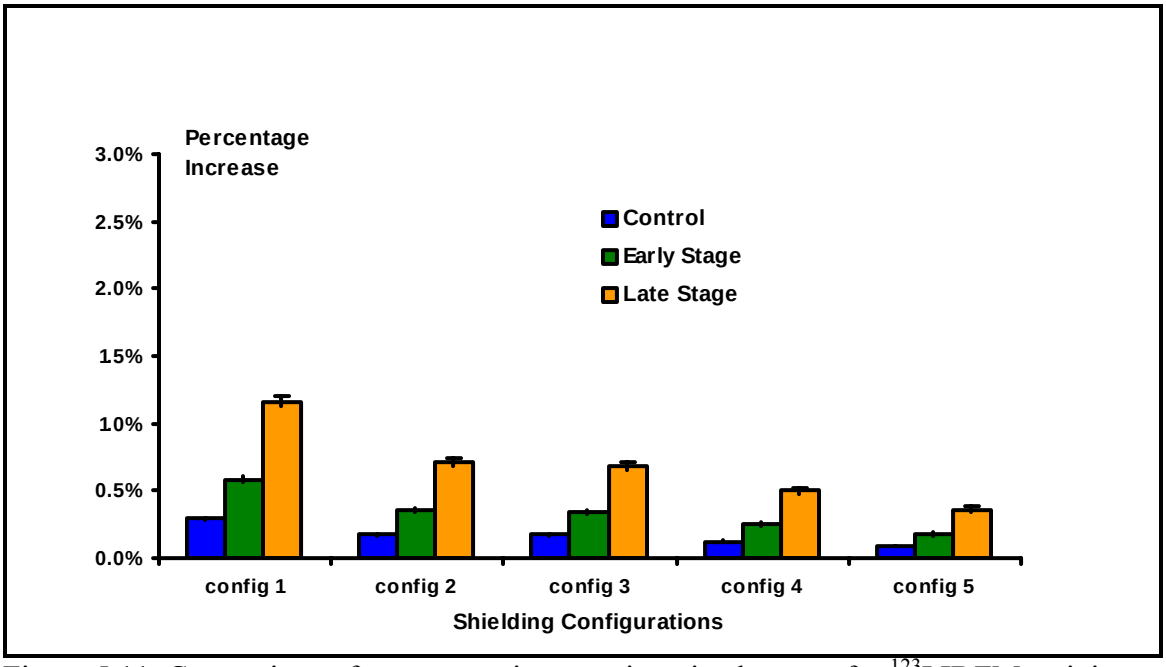



Figure 5.11. Comparison of percentage increase in striatal counts for $^{123}$I IBZM activity uptake in the striata of controls and early, stage, and late-stage Parkinson's disease patients. The controls are considered to have normal striatal activity. It can be seen that as activity uptake in the striata decreases the significance of out-of-FOV count contribution increases. $^{123}$I IBZM has the lowest percentage increase due to its low activity uptake in the lungs. The percent increase is across the entire scintillation crystal.

### 5.2.3 Discussion

In order to perform accurate conjugate imaging of two aligned sources, the activity outside the FOV must be appropriately shielded and/or appropriately accounted for. Five shielding configurations of thicknesses from ¼ to ¾ inch are investigated using MCNP-4c simulations. It is determined that configuration 4 with ½ inch tungsten walls is a sufficient shielding design for the mobile conjugate imaging system. Although configuration 5 with ¾ inch tungsten walls shields better than configuration 4, configuration 4 provides comparable shielding to configuration 5 with about ¾ the weight.

The magnitude of the percent increase in striatal counts is dependent on the radiopharmaceutical used and the severity of the disease. The percent increase for patients in the late stages of Parkinson's disease is about 3-4 times the percent increase of controls. The differences in percent increases among the radiopharmaceuticals are a function of the ratio of uptake in the striata and out-of-FOV activity, specifically the lungs. Although the activity uptake in the GI tract is significantly larger than the activity uptake in the lungs for all three radiopharmaceuticals, the activity uptake in the lungs contributes more counts to the striatal ROI than the activity in the GI tract. Since the lungs are closer to the gamma cameras, photon emissions have a shorter distance to travel to reach the gamma cameras. For example, for $^{123}$I IBZM, the activity uptake in the GI tract is much larger than the uptake in the lungs. As a result, the percent increase in the striatal counts due to $^{123}$I IBZM is not as large as the percent increase due to $^{123}$I β-CIT, which has a higher activity uptake in the lungs. However, the percent increase associated with $^{123}$I FP-CIT is due to the relatively low activity uptake in the striata. Thus, an increase in striatal counts due to out-of-FOV activity results in a larger percent increase.

These studies assume that penetration events from the GI tract and lungs are uniformly distributed across the scintillation crystal. Under this assumption, background ROI subtraction used in the conjugate calculation of the striata activity uptake eliminate the penetration events due to GI tract and lung activity for all configurations simulated, with negligible additional statistical error. However, further analysis of the results reveals that the counts from the activity uptake in the GI tract and lungs are not uniformly distributed across the scintillation crystal. It is determined that there is approximately a 4:1 variation in the rates of penetration events across the crystal. Simulations are

performed to investigate the significance of non-uniform count distribution across the crystal on background subtraction and on the limits of quantitative accuracy associated with the ½ inch shielding configuration.

## 5.3 Shielding Characterization

Monte Carlo simulations are performed to determine the spatial distribution of shielding penetration events across the scintillation crystal for the shielding design with ½ inch tungsten walls. The code parameters, such as physics and mode, the simulation set-up, and the number and energy of photons as described in section 5.1 are used with the exception of collimator design. The collimator used in this study as well as in subsequent studies is hexagonal, with hole size 1.8 mm, septa thickness of 0.25 mm, hole length of 40 mm, and sensitivity of 250 cpm/ μCi. In addition, MCNP's ptrac feature is used to track source photons, scattered photons, and fluorescent photons that interacted in the scintillation crystal and to output the location of interaction events and energy deposited per event.

### 5.3.1 Data Analysis

Images of out-of-FOV activity and in-FOV striatal activity are generated from MCNP-4c ptrac outputs. The MCNP ptrac feature is used to track source photons, scattered photons, and fluorescent photons that interact in the scintillation crystal and to output the event location and energy deposited at each event. A code is written in Matlab to parse the ptrac files and to generate energy-windowed images. The Matlab code provides ROI selection capabilities and event filtering options based on interaction

location with respect to the gamma camera. The energy windows used are a 20% window centered on 159 keV and two 20% windows one centered on 129 keV, the other on 195 keV. The image size is 64 x 64 pixels, where the pixel size is 0.15625 cm.

The simulated images are generated based on energy-weighted centroiding, a concept used in the generation of images from an ideal Anger camera. Energy-weighted centroiding is analogous to calculation of the center of mass. Photons may interact and deposit energy at more than one location in the scintillation crystal. Energy-weighted centroiding calculates the location at which the total energy deposited by a photon can be considered to be concentrated. This location is called the energy-weighted centroid. For this application the energy-weighted centroid is expressed in x and y coordinates. The energy-weighted centroid is expressed as

$$x_E = \frac{\sum_i^N x_i E_i}{\sum_i^N E_i} \tag{5.1}$$

$$y_E = \frac{\sum_i^N y_i E_i}{\sum_i^N E_i} \tag{5.2}$$

where $x_E$ and $y_E$ are the x and y coordinates of the energy-weighted centroid, respectively; index $i$ represents the ith energy-depositing interaction; $N$ is the total number of energy-depositing interactions; $x_i$ is the x coordinate for the ith interaction; $y_i$ is the y coordinate for the ith interaction; and $E_i$ is the energy deposited by the ith interaction. If the total energy deposited by a photon is within the 159 keV, 20% energy-

windowed image, a count is tallied in the pixel that corresponds to the location of the energy-weighted centroid. By using the energy-weighted centroid, cross-detection of an event by multiple photomultiplier tubes is ignored.

To determine a more accurate percent increase in the striatal counts due to out-of-FOV activity in the striatal region, a ROI with an area of 4.12 $cm^2$ (13 by 13 pixels) is placed around the pixels that correspond to the physical location of the striata on the striatal, GI tract, and lung images. The counts in the pixels within the ROI are summed and converted into cps/mCi. For the GI tract and lung images, in which only high-energy photons are simulated, the total ROI counts are multiplied by $3.7x10^7$ disintegrations/s/mCi and by 0.03 to reflect the fact that the emissions simulated represent only 3% high-energy emissions of $^{123}I$ and are divided by the total number of particles simulated to yield cps/mCi. The cps/mCi in each pixel within the ROI in GI tract image are added to the cps/mCi in the corresponding pixel in the lungs image to yield a total out-of-FOV activity count rate per mCi. For the striatal images, the total ROI counts are multiplied by the $3.7x10^7$ disintegrations/s/mCi; divided by the total number of simulated photons; and by 0.83 to reflect the fact that the emissions simulated represent 83% of $^{123}I$ gamma emissions. The cps/mCi in each pixel within the ROI in one striatal image are added to the cps/mCi in the corresponding pixel in the second striatal image to yield a total striatal count rate per mCi.

The calculated cps/mCi in each pixel in the striata, GI tract and lung images are multiplied by the percentage of 5 mCi of radiopharmaceutical taken up by the striata, GI tract and lung, respectively. The biodistributions of $^{123}I$ β-CIT, $^{123}I$ FP-CIT, and $^{123}I$ IBZM are used. See table 5.1 for the percent uptakes in the striata, GI tract and lungs for

$^{123}$I β-CIT, $^{123}$I FP-CIT, and $^{123}$I IBZM. Then the count rates in each pixel in the striata, GI tract, and lung images are multiplied by 900 seconds to represent typical 15 minute planar images of activity uptake in the striata, GI tract and lungs. Assuming Poisson statistics, the error in the calculated counts was determined by taking the square root of the counts. The percent increase was determined for each radiopharmaceutical by dividing the total out-of-FOV activity counts by the total striatal counts.

It is noted that about 12% of counts due to striatal activity is displaced outside the 4 $cm^2$ (13 pixels x 13 pixels) ROI. As a result, the percent increase is determined for larger ROIs because the 4 $cm^2$ ROI does not account for partial volumes effects. A 9 $cm^2$ (19 pixels x 19 pixels) ROI and a 16 $cm^2$ (26 pixels x 26 pixels) ROI are also drawn around the striatal region to include displaced counts. To investigate the spatial distribution of counts due to out-of-FOV activity in non-striatal regions, background ROIs are drawn on the GI tract and lung count maps. However, the small FOV of the gamma camera limits the size of the background ROI. Thus, one background ROI is used in the investigations. The background ROI is about 3.125 cm by 2.03 cm (20 pixels x 13 pixels). The background ROI is placed below the striatal ROI; the distance between the ROIs depends on the size of the striatal ROI. For the 4 $cm^2$ striatal ROI, the background ROI is placed about 2.66 cm (17 pixels) from the bottom of the striatal ROI. For the 9 $cm^2$ striatal ROI, the background ROI is placed 2.34 cm (12 pixels) from the bottom of the striatal ROI. For the 16 $cm^2$ striatal ROI, the background ROI is placed about 1.25 cm (8 pixels) from the bottom of the striatal ROI. The counts in each ROI are assumed to be uniformly distributed. The counts within the striatal ROI and background ROI due to GI tract and lung activity are compared. The counts in the striatal ROI and background ROI

for the GI tract and lung count maps are compared to the counts in the striatal ROI and background ROI of the striatal count maps.

### 5.3.2 Results

Figure 5.12 is an image of the count distribution across the scintillation crystal from activity in the GI sphere for ½ inch of shielding of tungsten, configuration 4. The white boxes represent the ROIs. The top ROI is the striatal ROI and the bottom ROI is the background ROI. There are more counts in the bottom half of the crystal. The counts in the background ROI due to activity in the GI tract are about 1.3 times larger than the counts in the striatal ROI due to activity in the GI tract. Figure 5.13 is an image of the count distribution across the scintillation crystal from activity in the lungs for ½ inch of shielding of tungsten, configuration 4. There are more counts in the upper half of the scintillation crystal. The counts in the background ROI are about 40% of the counts in the striatal ROI.

Figure 5.14 shows the percent increases in counts in a 4 $cm^2$ striatal ROI due to the out-of-FOV activity uptake from 5 mCi (185 MBq) of $^{123}$I β-CIT, $^{123}$I FP-CIT, and $^{123}$I IBZM to control groups, patients in the early stages of Parkinson's disease, and patients in the late stages of Parkinson's disease. The percent increase due to out-of-FOV activity increases with the severity of Parkinson's disease for all three radiopharmaceuticals. The percent increases due to $^{123}$I β-CIT are determined to be 0.44%, 0.87%, and 1.75% for controls, early-stage Parkinson's patients, and late-stage Parkinson's patients, respectively. The percent increases due to $^{123}$I FP-CIT are determined to be 0.45%, 0.90%, and 1.80% for controls, early-stage Parkinson's patients,

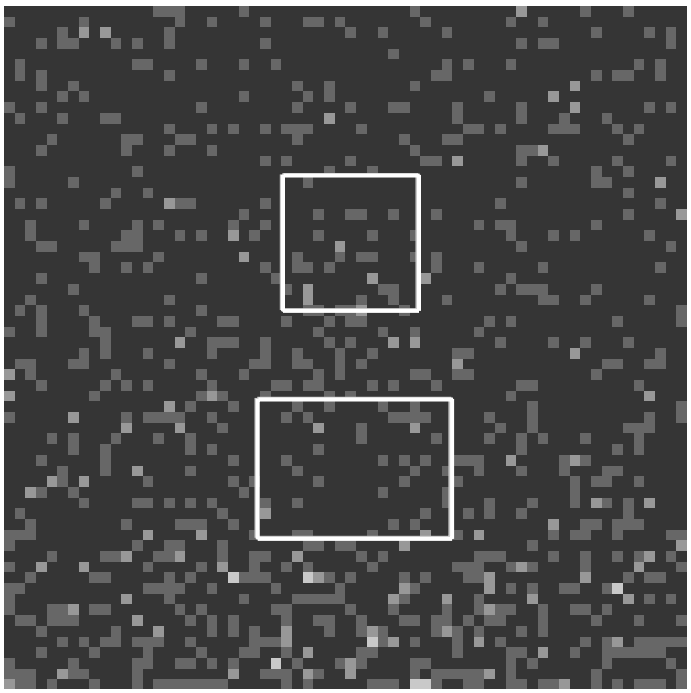


Figure 5.12. Count distribution across the face of the scintillation crystal from activity uptake in the GI tract and liver for a 159 keV energy-windowed image. The square is the striatal ROI. The lower rectangle is the background ROI. There are more counts in the bottom half of the image.

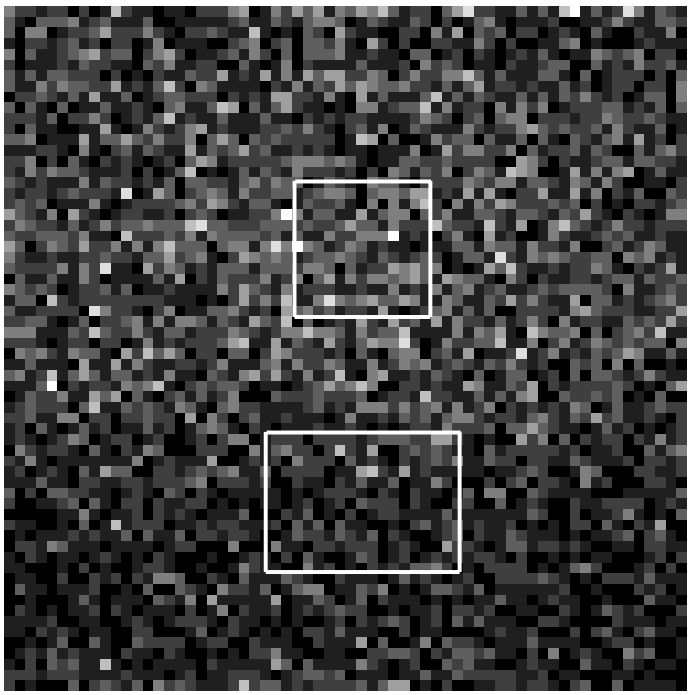


Figure 5.13. Count distribution across the face of the scintillation crystal from activity in the lungs for a 159 keV windowed image. The square is the striatal ROI. The lower rectangle is the background ROI. There are more counts in the upper half of the image. The striatal ROI contains approximately 2.5 times more counts than the background ROI.

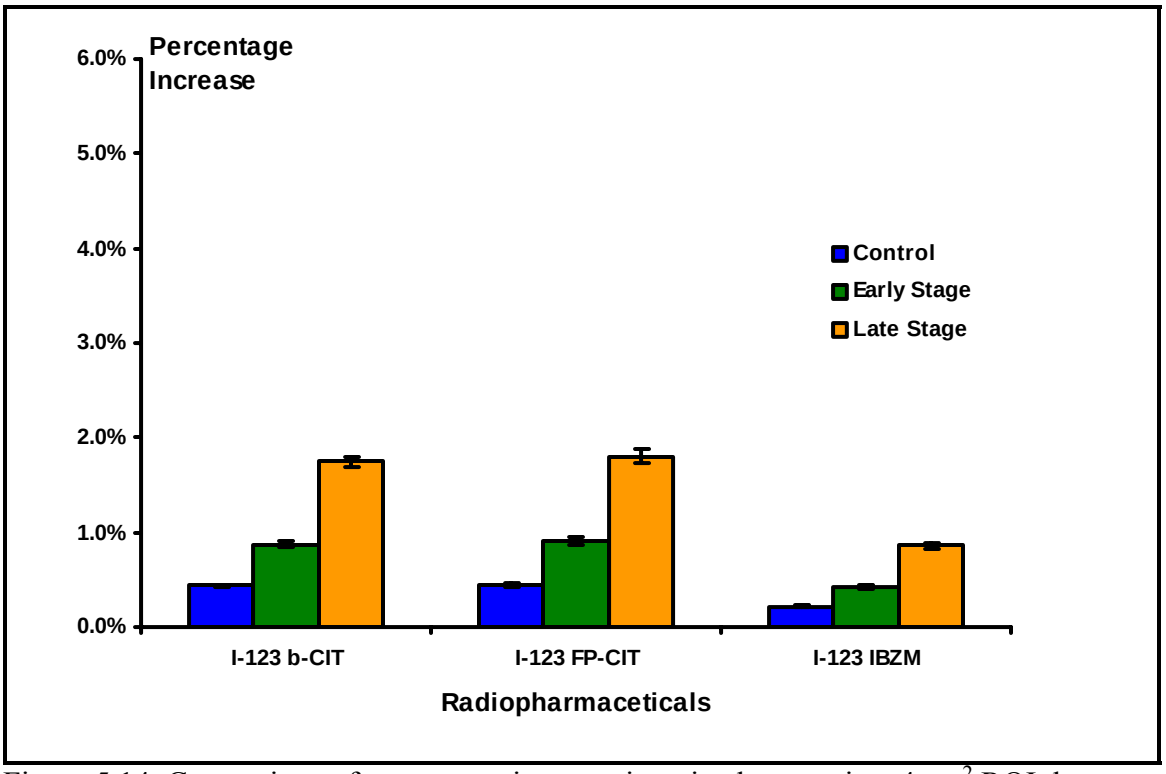



Figure 5.14. Comparison of percentage increase in striatal counts in a 4 $cm^2$ ROI due to activity uptake of $^{123}$I β-CIT, $^{123}$I FP-CIT, and $^{123}$I IBZM. Activity uptakes associated with control subjects, early and late stage Parkinson's disease patients are compared. It is shown that the percent increases in striatal counts due to out-of-FOV activity from $^{123}$I radiopharmaceuticals increase as activity uptakes in the striata decrease.

and late-stage Parkinson's patients, respectively. The percent increases due to $^{123}$I IBZM are determined to be 0.21%, 0.43%, and 0.86% for controls, early-stage Parkinson's patients, and late-stage Parkinson's patients, respectively. However, due to partial volume effects and blurring, striatal counts are spread outside the 4 $cm^2$ area. As a result, larger ROIs are drawn around the stratial regions to include counts that are displaced. Figure 5.15 shows the percent increases in striatal counts in a 9 $cm^2$ ROI. The percent increase due to $^{123}$I β-CIT are determined to be 0.77%, 1.54%, and 3.08% for controls, early-stage Parkinson's patients, and late-stage patients, respectively. The percent increases due to

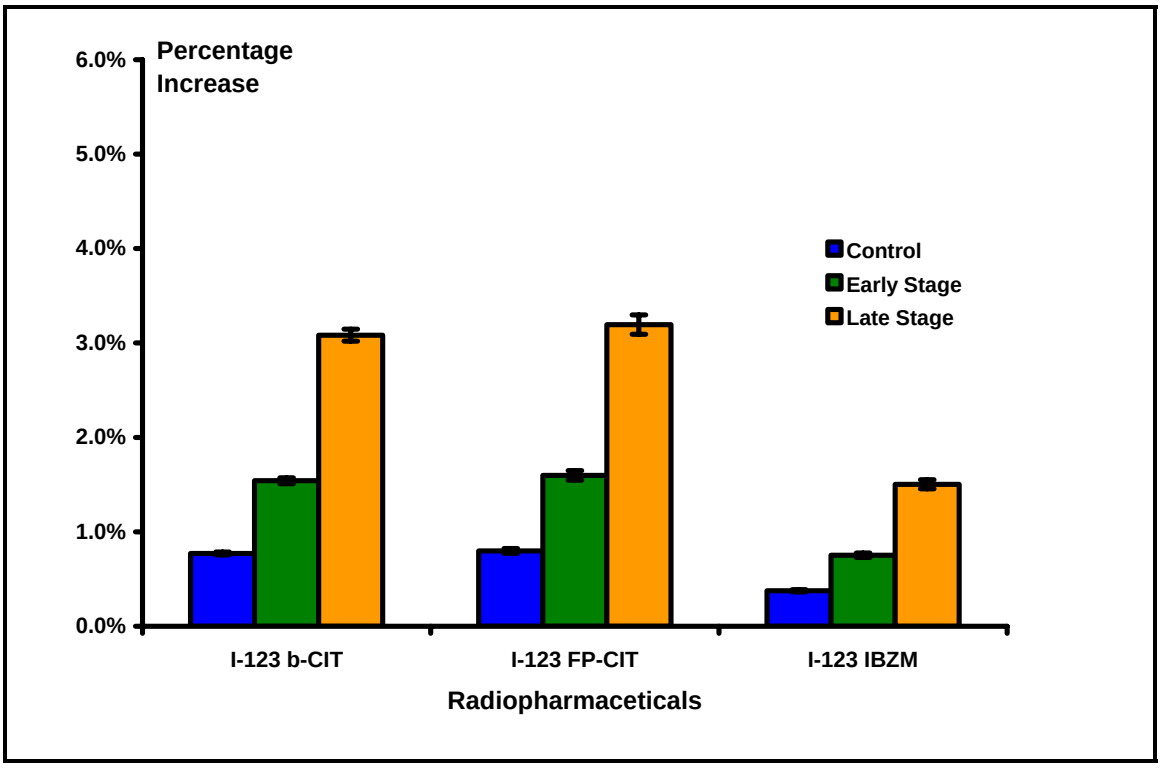



Figure 5.15. Comparison of percent increases in striatal counts for a 9 $cm^2$ ROI due to activity uptakes of $^{123}$I β-CIT, $^{123}$I FP-CIT, and $^{123}$I IBZM. Activity uptakes associated with control subjects, early and late stage Parkinson's disease patients are compared. The percent increase associated with the 9 $cm^2$ ROI is larger than that of the 4 $cm^2$ ROI.

$^{123}$I FP-CIT in the 9 $cm^2$ are determined to be 0.80%, 1.60%, and 3.19% for controls, early-stage Parkinson's patients, and late-stage Parkinson's patients, respectively. The percent increases due to $^{123}$I IBZM are determined to be 0.38%, 0.75%, and 1.50% for controls, early-stage Parkinson's patients, and late-stage Parkinson's patients, respectively. Figure 5.16 shows the percent increases in striatal counts in a 16 $cm^2$ ROI. The percent increases due to $^{123}$I β-CIT are determined to be 1.28%, 2.57%, and 5.13% for controls, early-stage Parkinson's patients, and late-stage Parkinson's patients, respectively. The percent increases due to $^{123}$I FP-CIT are determined to be 1.33%,

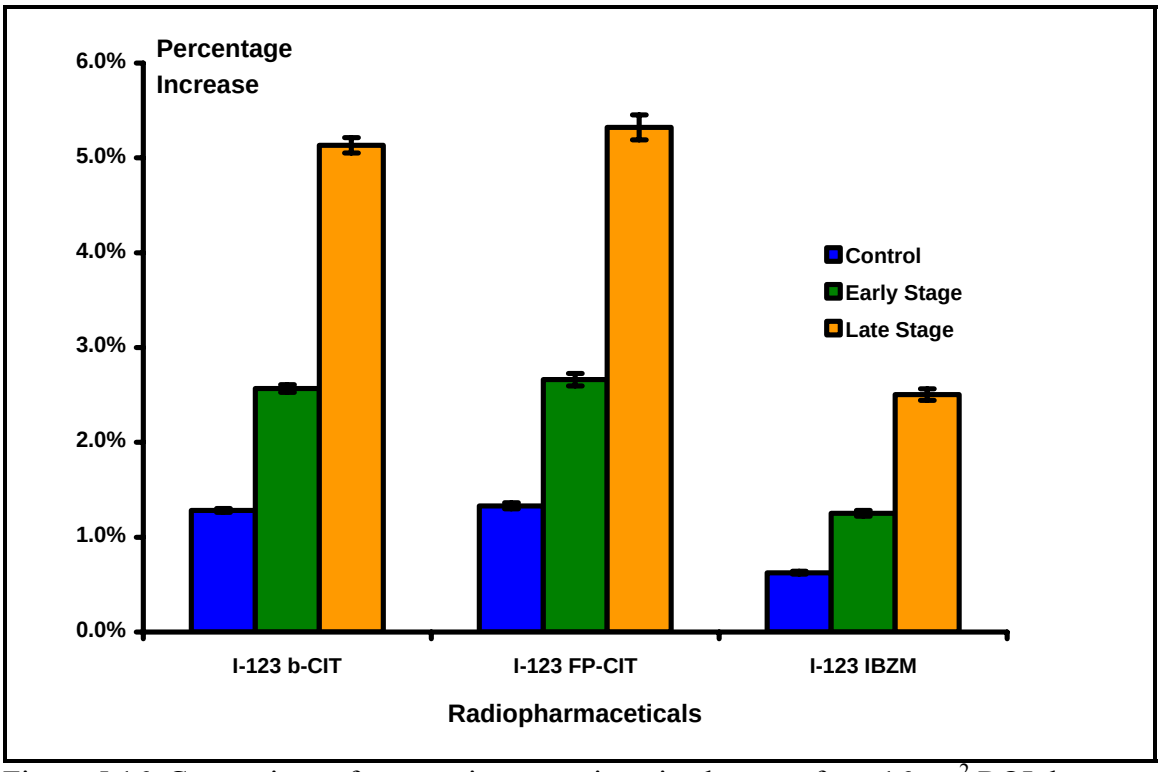



Figure 5.16. Comparison of percent increases in striatal counts for a 16 $cm^2$ ROI due to activity uptakes of $^{123}$I β-CIT, $^{123}$I FP-CIT, and $^{123}$I IBZM. Activity uptakes associated with control subjects, early and late stage Parkinson's disease patients are compared. As seen with the smaller ROIs, the percent increase in striatal counts increases with decrease in activity uptake. The percent increases associated with the 16 $cm^2$ ROI is larger than that of 4 $cm^2$ and 9 $cm^2$ ROIs.

2.66%, and 5.32% for controls, early-stage Parkinson's patients, and late-stage Parkinson's patients, respectively. The percent increases due to $^{123}$I IBZM are determined to be 0.63%, 1.25%, and 2.50% for controls, early-stage Parkinson's patients, and late-stage Parkinson's patients, respectively.

### 5.3.3 Discussion

In the context of conjugate imaging, subtraction of counts in a background region from counts in the striatal region is important. Thus, characterization of the spatial distribution of counts is important, specifically in the striatal and background ROIs. Preliminary simulations revealed that the spatial distribution of counts from out-of-FOV activity uptake in the GI tract was not uniformly distributed across the scintillation crystal. This prompted a second Monte Carlo simulation study. The second study is conducted to characterize the distribution of out-of-FOV counts across the scintillation crystal. This study is conducted using the shielding design with ½ inch tungsten walls, as it was determined that this shielding design was the model of choice. In this second study, the percent increase in striatal counts is determined by using counts in a ROI placed around the projected striatal area. The percent increase determined using the counts encompassed in a ROI is larger than the percent increase determined under the assumption that out-of-FOV activity uniformly distributes counts across the scintillation crystal. The assumption of a uniform count distribution generates an underestimation of percent increase. The use of ROIs provides a more accurate estimation of percent increase in striatal counts due to out-of-FOV activity.

The simulation studies performed show that a large percentage of gamma photons leave the lungs at angles that allow them to travel through the collimator bypassing the ½ inch thick tungsten shielding along the bottom of the camera and deposit energy in the upper portion of the scintillation crystal. The marked concentration of counts in the lower proportion of the scintillation crystal from activity uptake in the GI tract is due to the angle at which the photons escaped from the GI tract and impinge on the bottom of the

gamma camera. Although there is a significant difference in counts in the striatal ROI and the background ROI due to activity uptakes in the GI tract and lungs, the overall contributions of counts in the striatal ROI and background ROI due to out-of-FOV activity is negligible for $^{123}$I β-CIT, $^{123}$I FP-CIT, and $^{123}$I IBZM. However, the influence of the high-energy penetration counts increases as the striatal activity uptake decreases. The magnitude of this influence is also dependent on the ROI size; the larger the ROI the larger the influence.

# Chapter 6

## EVALUATION AND CHARACTERIZATION OF THE MODIFIED CONJUGATE IMAGING TECHNIQUE

Monte Carlo simulations are performed to evaluate and characterize the modified conjugate imaging technique in the context of the novel dedicated imaging system. The biodistributions of radiopharmaceuticals are simulated and the photon emissions from the radiopharmaceuticals are detected using simulated gamma cameras. Estimates of the activity uptake in each of the striatum are determined using the modified conjugate imaging technique. To assess the range of the technique three activity uptake ratios, which represented three stages of Parkinsonism, are simulated.

The simulated conjugate imaging is similar to practical conjugate imaging in that both require data acquisition and image array generation before conjugate imaging calculations can be performed. However, data acquisition for simulated conjugate imaging is obtained through Monte Carlo simulations. The generation of image data is an explicit process, which included converting the results from the Monte Carlo simulations into image data arrays. These data arrays are then used in the conjugate imaging calculations.

## 6.1 Monte Carlo Simulations

### 6.1.1 Data Acquisition

Simulation studies are performed using photon emissions of $^{123}$I and $^{99m}$ Tc using the primate/camera model discussed in chapter 5. To represent activity uptake of $^{123}$I and $^{99m}$ Tc radiopharmaceuticals, activity is uniformly distributed throughout the striata, head, lungs, and GI tract. The left striatum, right striatum, head, lungs, and GI tract simulations are performed separately. For $^{123}$I studies, two simulations are performed, one for 159 keV primary emissions and one for high-energy emissions ranging from 248 to 783 keV. The 159 keV and high-energy photons are emitted from the sources in proportion to their relative yields from $^{123}$I. A simulation study using 140 keV photon emissions is performed for the $^{99m}$Tc study. The 140 keV photons are emitted from the sources in proportion to their relative yields from $^{99m}$Tc. The parameters used in the simulations are described in section 5.2.1.

To represent acquired data from the second gamma camera Monte Carlo simulations are performed with the same geometry, but with a different random number sequence. This is done to ensure that the simulated photons used in generating data for the second camera does not undergo the same interactions as the photon used in generating the image data for the first gamma camera.

### 6.1.2 Image Generation

Images are generated from the ptrac output produced by the MCNP simulations. This process is described in section 5.3.1. In chapter 5, the images are only of scattered high-energy photon emissions from $^{123}$I emitted from activity distributions in the lungs

and gastrointestinal tract. The images in this section are generated from the primary photon emissions and high-energy photon emissions, if applicable, from $^{123}$I and $^{99m}$Tc radiopharmaceuticals in the striata, brain, and lungs and gastrointestinal tract. The biodistributions of these radiopharmaceuticals used in chapter 5 are also used for these studies. Table 6.1 lists the biodistributions, which include the activity uptake in brain. The activity uptake in the striata in table 6.1 is based on the activity uptake of a healthy individual. The activity in the striata is varied to simulate the various stages of Parkinson's disease. As the severity of the disease increases, the activity uptake in the striata decreases. In this study, three striatal activity uptake ratios, 1:1, 2:1, and 5:1 are investigated. The absolute activity in the right sphere is decreased for the 2:1 and 5:1 ratios.

Table 6.1 Percent Uptake of Radiopharmaceuticals in Brain, Striata, and Critical Organs

| Radiopharmaceutical | Striata | Brain | Lungs | Gastrointestinal Tract |
|---|---|---|---|---|
| $^{123}$I β-CIT | 2 | 10 | 21 | 52 |
| $^{123}$I FP-CIT | 0.8 | 2.2 | 9 | 18 |
| $^{123}$I IBZM | 1.7 | 2 | 8.1 | 27.5 |
| $^{99m}$Tc TRODAT | 0.63 | 0.12 | - | - |

- Percent uptake in that organ or system not used in simulation study.
$^{123}$I radiopharmaceutical biodistribution based on 5mCi of administered activity
$^{99m}$Tc TRODAT biodistribution based on 20mCi of administered activity

Since the amount of activity that accumulates in the brain, the striata, and the critical organs differs, the pixel values in the image arrays for the head, the striata, and the out-of-FOV organs are scaled by the appropriate uptake fraction of administered activity. Once the primary and high-energy image arrays for each organ are scaled, the corresponding primary and high-energy image arrays are added together to generate data that reflect an emission image from an activity distribution in each organ. Then all the emission images from the organs are added together to simulate a complete emission image from all activity uptakes seen in actual patients. For the $^{123}$I studies, the total injected dose is assumed to be 5 mCi. For the $^{99m}$Tc study the total injected dose is assumed to be 20 mCi. The $^{123}$I total dose is based on the recommendation of the European Association of Nuclear Medicine Procedure (Tatsch, Asenbaum et al. 2002). The $^{99m}$Tc total dose is based on research studies (Meegalla, Plossl et al. 1997; Fang, Wu et al. 2000). The pixel values in the energy-windowed images are converted into counts per second per milliCurie (cps/mCi). A total imaging time of 15 minutes (900 seconds) is used to represent typical planar imaging protocols.

The photopeak window for the $^{123}$I studies is a 20% window centered on 159 keV. The photopeak window for the $^{99m}$Tc studies is a 20% window centered on 140 keV. Thus, the photopeak window used for the $^{123}$I studies is 142 keV-175 keV and that used for the $^{99m}$Tc study was 126 keV-154 keV. The image size is 64 pixels x 64 pixels. The image data arrays computed from the MCNP data simulated with a different random number sequence are flipped from left to right to represent the mirrored view as would be seen by the second camera. Figures 6.1-6.5 show the images for the emissions from a calibration source, activity in the brain, both striatum, and the lungs and GI tract as seen

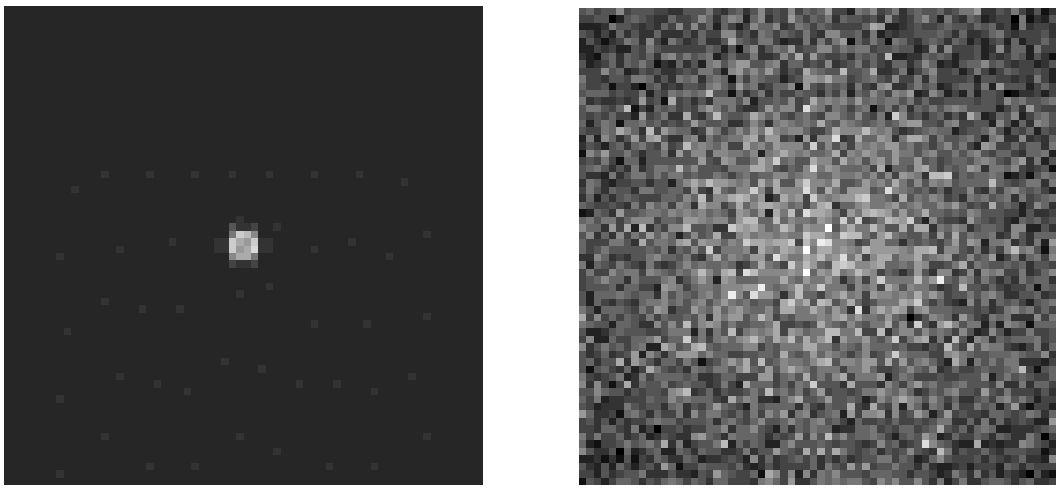


Figure 6.1. Images of a calibration source in the 159 keV 20% energy window as seen by the left gamma camera. These images are from the $^{123}$I β-CIT study. The left image is generated from the 159 keV emissions only. The right image is generated from the high-energy emissions only.

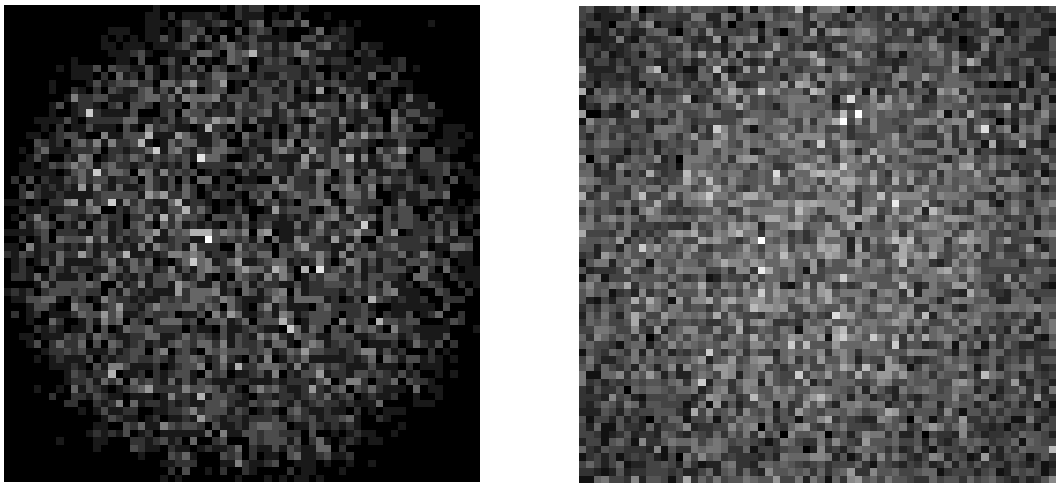


Figure 6.2. Images of brain activity in the 159 keV 20% energy window as seen as by the left gamma camera. These images are from the $^{123}$I β-CIT study. The left image is generated from the 159 keV emissions only. The right image is generated from the high-energy emissions only.

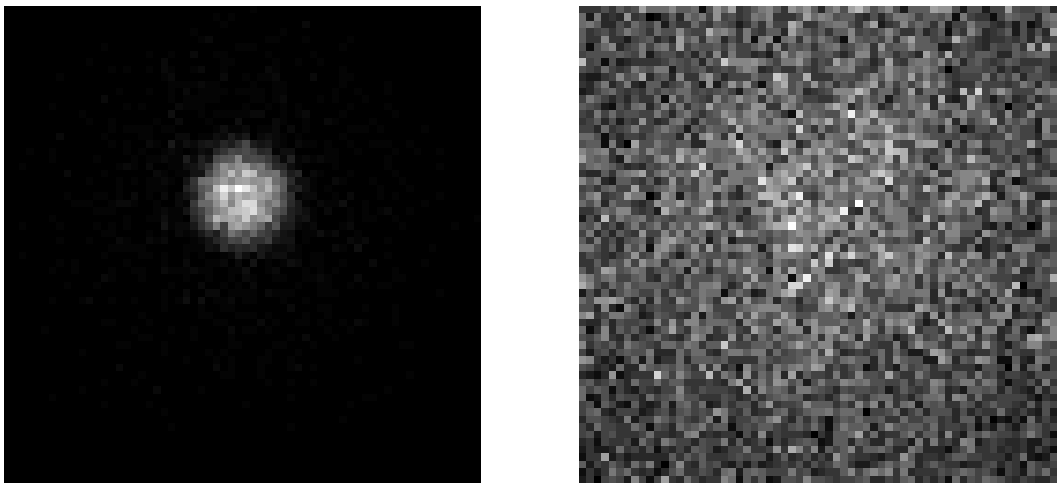


Figure 6.3. Images of activity in the right striatum in the 159 keV 20% energy window as seen by the left gamma camera. These images are from the $^{123}$I β-CIT study. The left image is generated from the 159 keV emissions only. The right image is generated from the high-energy emissions only.

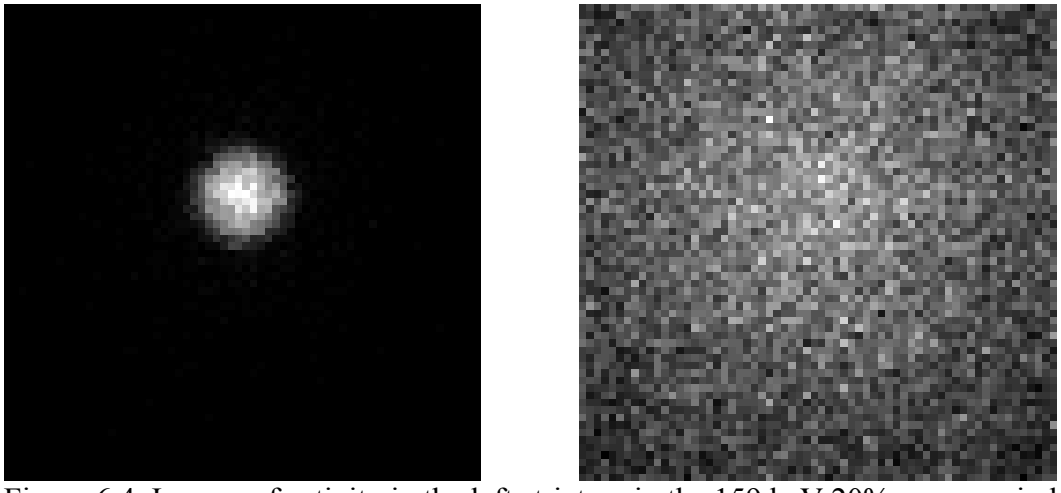


Figure 6.4. Images of activity in the left striatum in the 159 keV 20% energy window as seen by the left gamma camera. These images are from the $^{123}$I β-CIT study. The left image is generated from the 159 keV emissions only. The right image is generated from the high-energy emissions only.

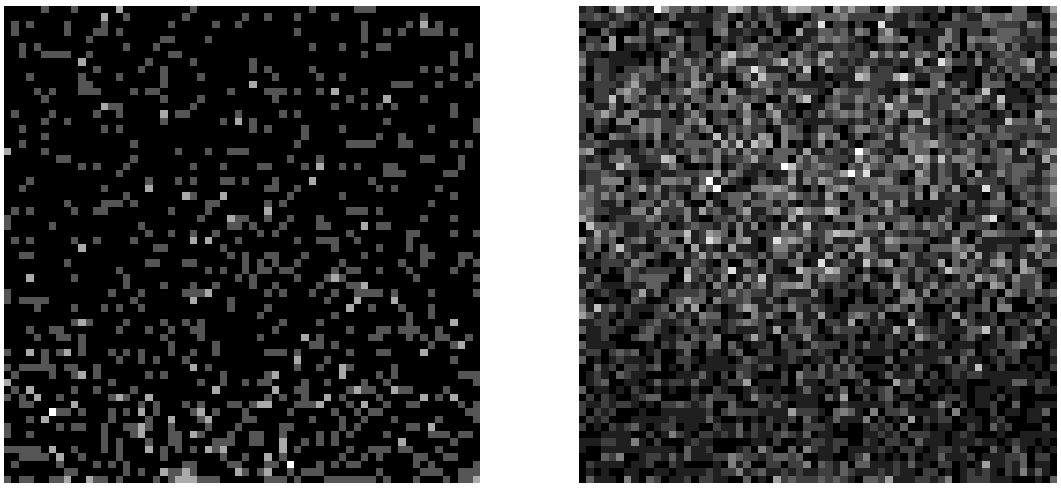


Figure 6.5. Images of activity in the GI tract (left) and lungs (right) in the 159 keV 20% energy window as seen by the left gamma camera. These images are from the $^{123}$I β-CIT study. These images are generated from the detection of high-energy emissions only.

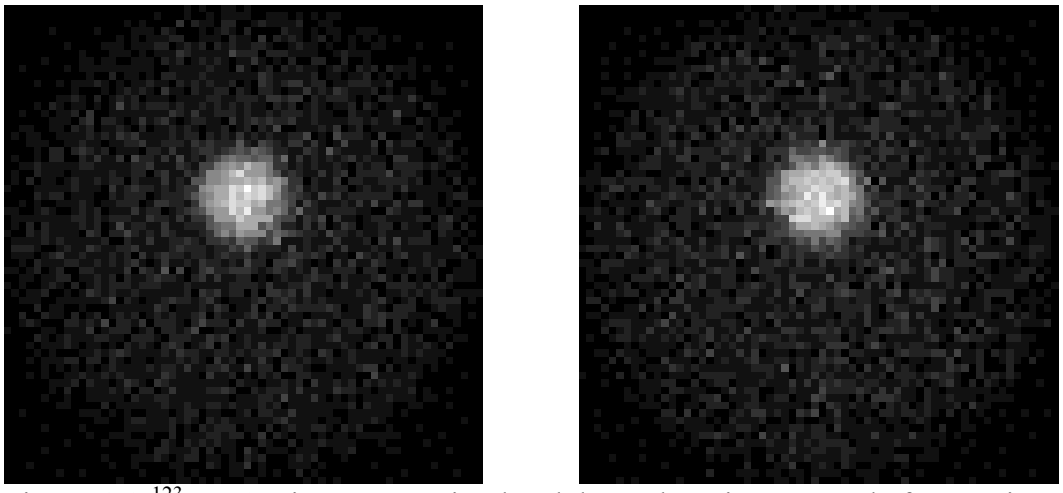


Figure 6.6. $^{123}$I β-CIT images 1:1 simulated data. These images are before conjugate imaging calculation. Image on the left is from the left simulated gamma camera. Image on the right is from the right simulated gamma camera.

by the left gamma camera for the case of $^{123}$I β-CIT. Figure 6.6 is the sum of the calibration, brain activity uptake, striatal activity uptake, lungs activity uptake, and GI tract activity uptake image data. This represents a complete emission conjugate imaging images for the study.

### 6.1.3 Conjugate Imaging

The theoretical development of the conjugate imaging calculations for two aligned sources is discussed in chapter 3. In summary, conjugate imaging requires three data sets, emission, transmission, and flood data sets. The transmission data are used to determine the effective attenuation coefficient. The flood data are used to determine the camera sensitivities. The emission data are used to estimate the activity in the left and right striata above background using the estimated attenuation coefficient and the estimated camera sensitivities. A relative striatal uptake study is also performed to compare the accuracy of conjugate imaging estimations of striatal uptake ratios.

The conjugate imaging calculations performed in these studies require two regions of interest (ROIs), a striatal ROI and a background ROI. The conjugate imaging calculations are performed pixel by pixel within the striatal ROI. The background ROI is used to determine the background activity, the activity distributed in the brain. The activity in the background ROI is scaled by the ratio of average brain thickness in the striatal ROI and background ROI. The estimated background activity is subtracted from the estimated activity in the striatal ROI. The dimensions of these ROIs are determined in a ROI study. The ROI study is discussed in the following section.

Several deviations are made in order to simulate acceptable statistically accurate data within reasonable execution times. An effective attenuation coefficient, determined from transmission data, is not used in the conjugate imaging calculations. Instead, narrow-beam and broad-beam attenuation coefficients from published data are used. Use of a uniform attenuation coefficient is considered to be reasonable as Monte Carlo simulations have shown that transmission-based non-uniform attenuation correction is not crucial for brain studies (Van_Laere, Koole et al. 2000; Van_Laere, Koole et al. 2001; Kim, Varrone et al. 2003). A constant attenuation coefficient used in quantitative brain studies produce reasonably accurate results (Tsui 1996; Van_Laere, Koole et al. 2000; Van_Laere, Koole et al. 2001). The narrow-beam attenuation coefficients used are interpolated from the published data from the National Institute of Standards and Technology (NIST). The broad-beam attenuation coefficients used are from published striatal studies. For the $^{123}$I studies the narrow-beam attenuation coefficient and the broad-beam attenuation coefficient are 0.1481 $cm^{-1}$ and 12 $cm^{-1}$, respectively (NIST 2004 and Soret et al. 2003). The broad-beam attenuation coefficient used for $^{123}$I is determined using a linear relationship between the narrow-beam and broad-beam attenuation coefficients of $^{123}$I and $^{99m}$Tc (Soret et al. 2003). The narrow beam attenuation and broad-beam attenuation coefficient used in the $^{99m}$Tc studies are 0.1526 $cm^{-1}$ and 0.12 $cm^{-1}$, respectively (NIST 2004)(Harris, Greer et al. 1984; Zaidi and Montandom 2002). The narrow-beam attenuation coefficient is used to represent a situation in which scatter photon detection is not taken into account. The broad-beam attenuation coefficient represented a situation in which scatter photon detection is taken into account.

A point source is used instead of a flood source to determine the sensitivity of the gamma cameras. The counts detected across the entire scintillation crystal are used to determine camera sensitivity. The simulated camera sensitivity data are generated into image data array using the same technique for organ-simulated data, excluding scaling the data for fractional activity uptake. Figure 6.1 shows an image of the calibration source emission. For the $^{123}$I sensitivity studies, a total of 200 million photons are simulated from the point source, 100 million 159 keV photons and 100 million high-energy photons. A total of 100 million 140 keV photons are simulated for the $^{99m}$Tc sensitivity studies. The values in the data arrays are converted into counts/decay and then summed over the entire face of the camera to yield the camera sensitivities.

Due to lack of counts, the background activity is averaged over the background ROI. After background subtraction, negative pixel values occur within the striatal ROI. To handle the negative pixel values a short iterative algorithm is used to sum all the negative pixel values. The sum of the negative pixel values is divided by the number of pixels with positive values. This value is subtracted from all positive value pixels and the negative values are replaced with zero. This process is repeated until no negative values were within the striatal ROI.

### 6.1.4 ROI Study

Although a crude ROI study is performed and described in chapter 5 for the shielding characterization, a MCNP study is performed to determine the best striatal and background ROI dimensions. Choosing an appropriate ROI size is of concern because counts from the striatal activity uptake are displaced due to blurring. An appropriate ROI

will include most of the counts from both striatum. The percent of counts contained in the ROIs depends on the proximity of the striatum to the gamma camera. Counts from the striatum nearest the gamma camera are consolidated to a smaller region than the counts from the far striatum.

The simulation set-up consists of a gamma camera and a sphere representing a striatum. The gamma camera has the same specifications described in the camera model section 5.1.2. The striatal sphere has a 2 cm diameter. To represent the left striatum, the near striatum, the striatal sphere is placed 4.22 cm from the gamma camera and 1 cm superior the gamma camera horizontal midline. To represent the right striatum, the far striatum, the striatal sphere is placed 6.0 cm from the gamma camera and 1 cm superior the gamma camera horizontal midline. For $^{123}$I, 159 keV photons are emitted from the left and right striatum separately and detected by the both gamma cameras. For $^{99m}$ Tc 140 keV photons are similarly emitted and detected. The total counts in various ROIs are compared to the total image counts. Square ROIs are used. The ROI sizes used in this study are 13 pixels x 13 pixels, 15 pixels x 15 pixels, 17 pixels x 17 pixels, 19 pixels x 19 pixels, 26 pixels x 26 pixels, and 32 pixels x 32 pixels. The dimensions of a pixel are 0.15625 cm x 0.15625 cm. The 13 pixels x 13 pixels ROI is 2.03 cm x 2.03 cm; the side of the ROI is approximately the diameter of the striatal sphere. The ROI with13 pixels x13 pixels contain 89% of the total counts for the near striatum study and approximately 77% of the total counts for the far striatum study. Approximately 96% of the total counts from the near striatum study are within the ROI with 19 pixels x19 pixels Approximately 86% of the total counts from the far striatum study are within the 19 pixels x19 pixels ROI. Although the percentage of total counts increases as the ROI increases, the 19 pixels

x19 pixels ROI is considered to be the best ROI size due to the small FOV of the gamma cameras. Larger ROIs increase cross talk between the striatum ROI and the background ROI, which is located below the striatal ROI. It should be noted that these count percents are determined in the absence of head attenuation and scatter.

The location of the background ROI is limited by the size of the small FOV gamma camera. As a result, background ROIs cannot be drawn too far from the striatal ROI. However, background ROIs too close to the striatal region might include counts from the activity uptake in the striata resulting in a possible overestimation of background activity. This overestimation of background activity reduces the amount of estimated activity in the striata. To determine the location of the background ROI, a background ROI is placed at different distances from the striatal ROI and the amount of background activity is estimated from the counts in the ROI. The counts in the ROI placed 4 pixels (0.625 cm) from the bottom edge of the gamma camera produce the background activity estimate closest to the known background activity. The background activity estimation using background ROIs ranging from 13 pixels x 13 pixels to 32 pixels x 32 pixels does not vary significantly. As result the size of the background ROI is kept at 13 pixels x 13 pixels ROI.

## 6.2 Results

### 6.2.1 Absolute Activity Estimation

#### *6.2.1.1 13 pixels x 13 pixels ROI*

Although it is determined in the ROI study that the 13 pixels x 13 pixels ROI does not contain adequate counts, conjugate imaging studies are performed using a 13 pixels x

13 pixels ROI for comparative purposes. Conjugate imaging studies for all ROI sizes are in Appendix A. Two conjugate imaging studies are performed for each radiopharmaceutical. The first study uses a narrow-beam attenuation coefficient and the second uses a broad-beam attenuation coefficient. Table 6.2 lists the percent error for the estimates of background activity per $cm^2$ for each activity uptake study. The percent error for the estimates of background activity, the brain activity uptake, for $^{123}$I β-CIT study increases as the activity uptake increases. The percent errors for background activity estimates for the other radiopharmaceuticals decreases as the activity uptake increases. Table 6.3 lists the percent errors for the activity estimates of the left and right striata for the 1:1, 2:1, and 5:1 uptake ratios using the 13 pixels x 13 pixels ROI and the narrow-beam attenuation coefficients. For the $^{123}$I radiopharmaceutical studies, the percent errors for right and left striata activity estimates for the 1:1 uptake ratio are relatively equal. However, as the activity uptake ratio increases, the difference between the percent errors increases. The percent error in the activity estimate for the left striatum remains relatively stable as the percent error associated with the activity estimate of the right striatum increases significantly. For the $^{99m}$Tc TRODAT study, the difference between the percent errors also increases. While the percent error for the left striatum increases, the percent error for the right striatum decreases. The magnitude and direction of the percent errors for the left and right striatum in the $^{99m}$Tc TRODAT study are considerably smaller than those for the $^{123}$I radiopharmaceutical studies. The difference between the percent errors for the left and right striata is also smaller than the difference for the $^{123}$I radiopharmaceutical studies. Table 6.4 lists the percent error in the activity estimation of the left and right striata for the 1:1, 2:1, and 5:1 uptake ratio using the 13 pixels x 13

Table 6.2. Percent Errors for Background Activity Estimates for Activity Uptakes

| Background Activity Estimates | | | |
|---|---|---|---|
| ROI: 13 pixels x 13 pixels | Percent Error | | |
| Radiopharmaceuticals | 1:1 | 2:1 | 5:1 |
| I-123 beta-CIT | -0.59% | -2.37% | -3.44% |
| I-123 FP-CIT | 5.99% | 2.82% | 0.90% |
| I-123 IBZM | 21.63% | 14.62% | 10.34% |
| Tc-99m TRODAT | 24.41% | 15.47% | 8.73% |

Table 6.3. Percent Errors for Activity Estimates for Narrow-beam Attenuation Study

| Striatal Uptake Ratios | | | | | | |
|---|---|---|---|---|---|---|
| ROI: 13 pixels x 13 pixels | Percent Error | | | | | |
| | 1:1 | | 2:1 | | 5:1 | |
| Radiopharmaceuticals | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| I-123 beta-CIT | -14.73% | -16.41% | -14.47% | -21.61% | -14.31% | -37.22% |
| I-123 FP-CIT | -13.32% | -14.07% | -13.06% | -16.94% | -12.91% | -25.53% |
| I-123 IBZM | -12.18% | -12.28% | -11.94% | -13.59% | -11.79% | -17.52% |
| Tc-99m TRODAT | 6.23% | 6.36% | 6.61% | 5.97% | 6.85% | 4.88% |

*$^{123}$I Attenuation coefficient: 0.1481 cm$^{-1}$; ^ $^{99m}$ Tc Attenuation coefficient: 0.1526 cm$^{-1}$

Table 6.4. Percent Errors for Activity Estimates for Broad-beam Attenuation Study

| Striatal Uptake Ratios | | | | | | |
|---|---|---|---|---|---|---|
| ROI: 13 pixels x 13 pixels | Percent Error | | | | | |
| | 1:1 | | 2:1 | | 5:1 | |
| Radiopharmaceuticals | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| I-123 beta-CIT * | -24.56% | -26.38% | -19.90% | -39.99% | -17.10% | -80.84% |
| I-123 FP-CIT* | -23.40% | -24.21% | -18.75% | -35.68% | -15.96% | -70.04% |
| I-123 IBZM* | -22.46% | -22.57% | -17.81% | -32.61% | -15.02% | -62.72% |
| Tc-99m TRODAT^ | -8.07% | -7.92% | -1.69% | -20.33% | 2.14% | -57.49% |

* $^{123}$I Attenuation coefficient: 0.12cm$^{-1}$; ^ $^{99m}$ Tc Attenuation coefficient: 0.12 cm$^{-1}$

pixels ROI and the broad-beam attenuation coefficients. The percent errors in this study are larger than the corresponding percent errors in the narrow-beam attenuation coefficient study. The activity estimates are underestimated for all radiopharmaceuticals. Similar to the narrow-beam attenuation coefficient study, the differences between the percent errors for the left and right striatal activity estimates increase as the activity uptakes increase. However, the magnitudes of the differences are considerably larger than the corresponding magnitudes in the broad-beam attenuation coefficient study. The percent errors in the activity estimates for the left striatum decrease as the percent errors associated with the activity estimates of the right striatum increase significantly for all radiopharmaceuticals.

#### ***6.2.1.2*** *19 pixels x 19 pixels ROI*

The 19 pixels x 19 pixels ROI is chosen as the best ROI size because of the size of the conjugate imaging system FOV and adequate counts from both striata are contained in this ROI. The estimates of the background activity per $cm^2$ for the activity uptake studies are listed in Table 6.5. Similar to the 13 pixels x 13 pixels ROI study, the percent errors associated with the background activity estimates for the $^{123}$I β-CIT study increase as the activity uptake ratios increase. The magnitudes of the percent errors are larger for the 19 pixels x 19 pixels ROI. The percent errors in the other radiopharmaceutical studies are smaller than the percent errors in the 13 pixels x 13 pixels ROI study and decrease as the activity uptake ratios increase. Table 6.6 lists the percent error for the estimates of activities in the left and right striata for the 1:1, 2:1, and 5:1 activity uptake ratios using the 19 pixels x 19 pixels ROI and the narrow-beam

Table 6.5. Percent Errors for Background Activity Estimates for Activity Uptakes

| Background Activity Estimates | | | |
|---|---|---|---|
| ROI: 19 pixels x 19 pixels | Percent Error | | |
| Radiopharmaceuticals | 1:1 | 2:1 | 5:1 |
| I-123 beta-CIT | -2.33% | -4.08% | -5.14% |
| I-123 FP-CIT | 4.13% | 1.02% | -0.88% |
| I-123 IBZM | 19.49% | 12.61% | 8.40% |
| Tc-99m TRODAT | 22.23% | 13.44% | 6.82% |

Table 6.6. Percent Errors for Activity Estimates for Narrow-beam Attenuation Study

| Striatal Uptake Ratios | | | | | | |
|---|---|---|---|---|---|---|
| ROI: 19 pixels x 19 pixels | Percent Error | | | | | |
| | 1:1 | | 2:1 | | 5:1 | |
| Radiopharmaceuticals | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| I-123 beta-CIT | -9.23% | -3.43% | -10.14% | -1.35% | -10.69% | 5.09% |
| I-123 FP-CIT | -6.52% | -3.06% | -7.44% | -0.64% | -7.99% | 6.70% |
| I-123 IBZM | -4.43% | -2.65% | -5.38% | -0.10% | -5.94% | 7.60% |
| Tc-99m TRODAT | 15.77% | 16.21% | 13.88% | 20.77% | 12.77% | 34.61% |

* $^{123}$I Attenuation coefficient: 0.1481 $cm^{-1}$; ^ $^{99m}$ Tc Attenuation coefficient: 0.1526 $cm^{-1}$

attenuation coefficient. The percent errors associated with the left and right striata for the $^{123}$I radiopharmaceutical studies are within ±11% for all three uptake ratios. As the activity ratios increase, the activity estimates for the left striatum slightly decrease and the activity estimates for the right striata increase. Table 6.7 lists the percent errors for the estimates of activities in the left and right striata for the 1:1, 2:1, and 5:1 striatal uptake ratios using the 19 pixels by 19 pixels ROI and the broad-beam attenuation coefficient. In the $^{123}$I radiopharmaceutical studies, the activity estimates for all activity uptake ratios are

Table 6.7 Percent Errors for Activity Estimates for Broad-beam Attenuation Study

| Striatal Uptake Ratios | | | | | | |
|---|---|---|---|---|---|---|
| ROI: 19 pixels x 19 pixels | Percent Error | | | | | |
| | 1:1 | | 2:1 | | 5:1 | |
| Radiopharmaceuticals | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| I-123 beta-CIT * | -20.45% | -14.11% | -16.66% | -20.83% | -14.39% | -40.81% |
| I-123 FP-CIT* | -17.81% | -14.03% | -14.03% | -20.70% | -11.77% | -40.65% |
| I-123 IBZM* | -15.80% | -13.85% | -12.03% | -20.61% | -9.77% | -40.84% |
| Tc-99m TRODAT^ | 0.18% | 0.68% | 4.60% | -7.42% | 7.28% | -31.61% |

* $^{123}$I Attenuation coefficient: 0.12cm$^{-1}$; ^ $^{99m}$ Tc Attenuation coefficient: 0.12 cm$^{-1}$

underestimated. As the activity uptake ratios increase, the percent errors for the left striatum decrease and the percent errors for the right striatum increase. The percent errors for the right striatum are similar for all $^{123}$I radiopharmaceutical studies. For the $^{99m}$Tc TRODAT study, the percent errors for activity estimates for left striatum and right striatum increase as the activity uptake ratios increase. The percent errors for the $^{99m}$Tc TRODAT are considerably smaller than the percent errors for the $^{123}$I studies.

### 6.2.2 Relative Activity Estimation

Relative activity uptake ratios are also calculated using the activity estimates calculated from the 13 pixels x 13 pixels ROI and narrow-beam attenuation coefficient study and the 19 pixels x 19 pixels ROI and narrow-beam attenuation coefficient study described above. These studies are chosen because the activity estimates determined in these studies have relatively small percent errors. Figure 6.7 is a graph of the percent errors for the calculated relative uptake ratios using the 13 pixels x 13 pixels ROI and narrow-beam attenuation coefficient. The percent errors associated with the estimated

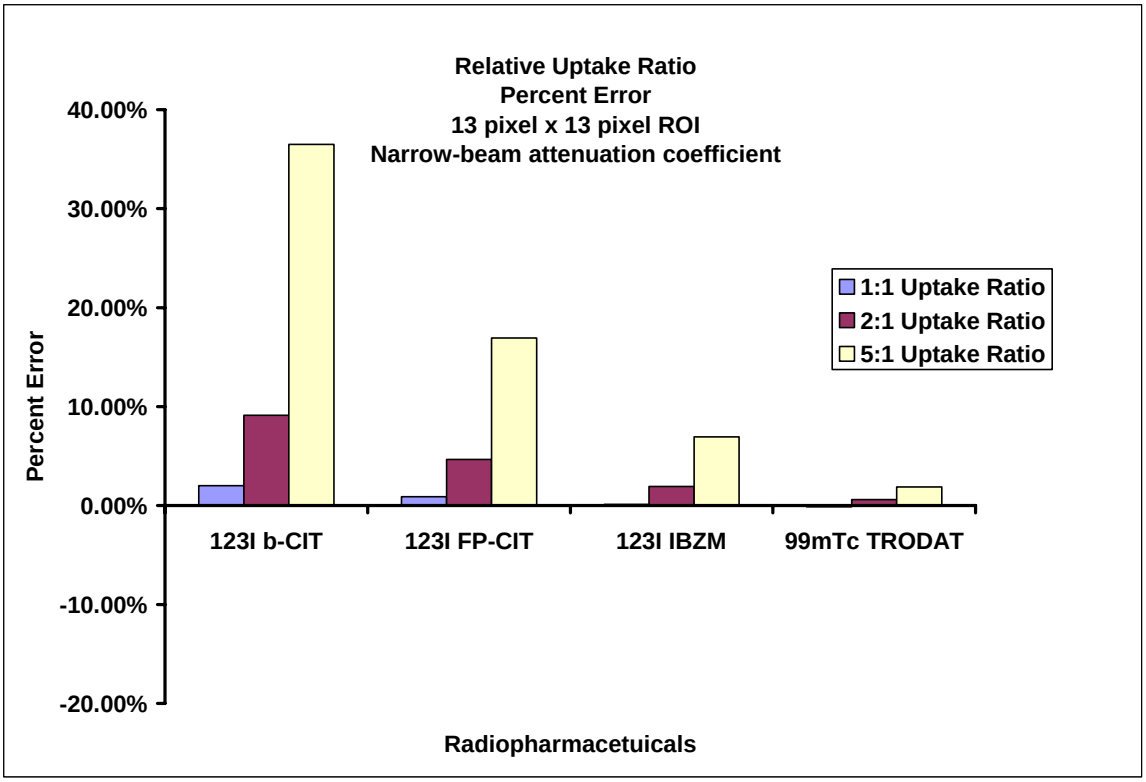



Figure 6.7. Relative uptake ratio for 13 pixels x 13 pixels ROI. Percent error in activity ratio between left and right striatum using the 13 pixels x 13 pixels ROI and a narrow-beam attenuation coefficient for the 1:1, 2:1, and 5:1 activity ratio.

activity ratios for the 1:1 and 2:1 ratios are less than 10% for all radiopharmaceutical studies. The percent error for the estimated activity ratio for the 5:1 ratio varies widely among the radiopharmaceuticals. The $^{123}$I β-CIT study generates the worst percent error (36.5%) and $^{99m}$ Tc TRODAT generates the best percent error (1.9%).

Figure 6.8 is a graph of the percent errors for relative uptake ratios calculated using the 19 pixels x 19 pixels ROI and narrow-beam attenuation coefficient. The percent errors associated with the estimated activity ratios for the 1:1 and 2:1 activity uptake ratio are less than -9% for all radiopharmaceutical studies. Unlike the 13 pixels x 13 pixels

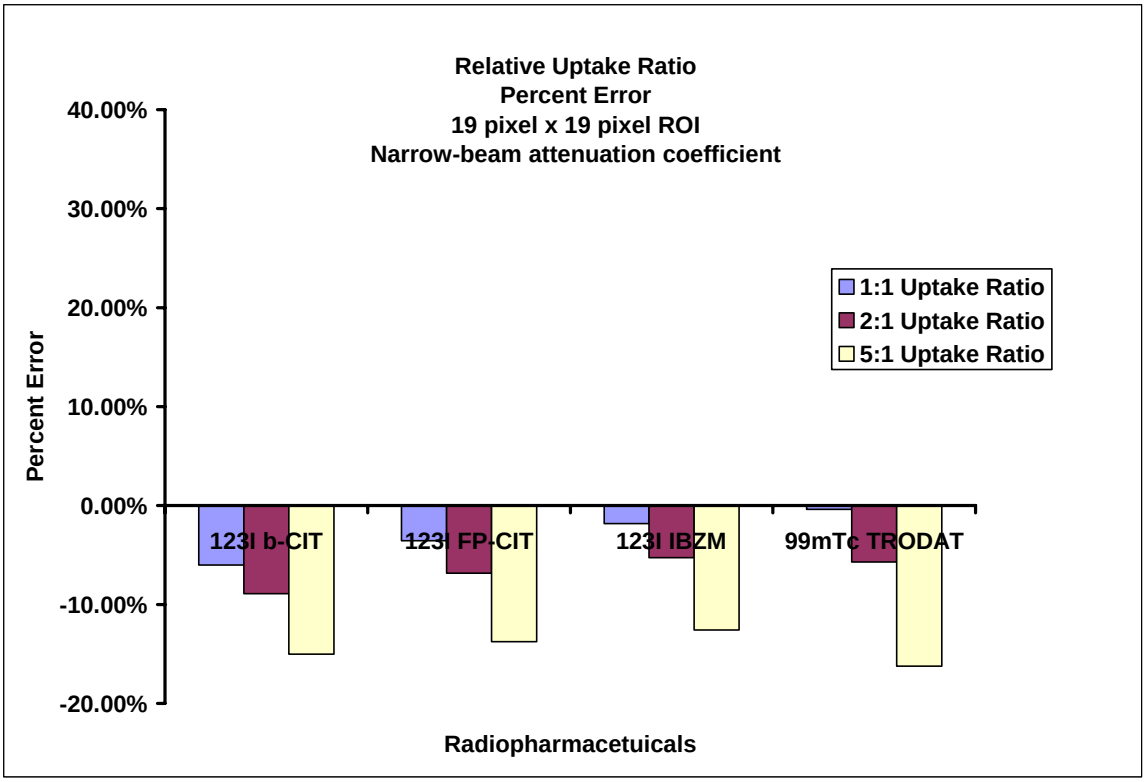



Figure 6.8. Relative uptake ratio for 19 pixels x 19 pixels ROI. Percent error in activity ratio between left and right striatum using the 19 pixels x 19 pixels ROI and a narrow-beam attenuation coefficient for 1:1, 2:1, and 5:1 activity ratios.

ROI study, the differences between percent errors among the radiopharmaceuticals are relatively small. The $^{99m}$ Tc TRODAT study generates the worst percent error of -16.2% and the $^{123}$I IBZM study generates the best percent error of -12.6%

## 6.3 Discussion

Simulation studies are performed to assess the accuracy of activity estimates for each of the striata determined using the modified conjugate imaging technique and a proposed dedicated conjugate imaging system. The accuracies of the activity uptake

ratios between the left and right striata are also determined using the technique and imaging system. The biodistributions of four radiopharmaceuticals are used in the studies to evaluate the influence of biodistribution on the accuracy of estimation of activities in left and right striata and estimation of activity uptake ratios. The agents used are chosen because of their clinical viability. The activity uptake in the right sphere representing the right striata is varied to simulate unequal activity uptake in the left and right striata characteristic in Parkinson's disease.

The accuracy of the activity estimate for each striatum is influenced by ROI size, attenuation coefficient, and biodistribution of the radiopharmaceutical. ROI size and attenuation coefficient are correlated in their influence on accuracy. The activity estimates determined from the counts in the 13 pixels x 13 pixels ROI are on average smaller than activity estimates determined from counts in the 19 pixels x 19 pixels ROI due to the lack of counts. The extent of this underestimation of activity is dependent on the attenuation coefficient applied. The application of the broad-beam attenuation coefficient results in large underestimations of the activity uptakes for the 13 pixels x 13 pixels and 19 pixels x 19 pixels ROI. This indicates that the broad-beam attenuation coefficient chosen is too broad, overestimating the detection of scattered photons. The modified conjugate imaging technique uses a measured effective attenuation coefficient to account for attenuation and the inclusion of scattered photons. It is determined through error analysis of the modified technique that -2.5% error in the attenuation coefficient of the brain results in 1-7% underestimation errors in the activity estimates. Although the use of constant attenuation coefficients is warranted, the large percent errors for the activity estimates suggest that the broad-beam attenuation coefficient used is

underestimated by more than 2.5%. A measured effective attenuation coefficient might produce more accurate results, as the effects of geometry might thus be better modeled. The studies are performed without skull effects. Modeling of a skull will increase attenuation and scatter. An effective attenuation coefficient would include these effects. However, use of a transmission-based attenuation coefficient could introduce statistical error and might require an averaging technique as did the background activity estimations.

The differences in biodistribution influence the accuracies of the background and striatal activity estimates. When the percent uptake for the striata was larger or comparable to the percent uptake of brain, the percent errors for background activities are significantly overestimated. Scatter from the striatal region contribute counts to the background ROI, which result in an overestimation of background activity. Due to the large difference in volumes between the striata and the brain, comparable percent uptakes indicate that activity concentration in the brain is significantly smaller than that of the striata. As a result, a small amount of scatter contribution into the background ROI translates to a larger fractional increase. The magnitudes of the percent errors for the striatal estimates are also associated with the differences between the percent uptake of the striata and brain. Larger differences between the percent uptakes of striata and brain result in larger percent errors in activity estimates. The differences in magnitudes for the $^{123}$I radiopharmaceuticals are less apparent for the broad-beam attenuation coefficient studies.

The $^{99m}$Tc radiopharmaceutical studies usually results in an overestimation of activity, especially when the narrow-beam attenuation coefficient is applied. This is

contrary to the $^{123}$I studies, which usually result in an underestimation of activity. This difference can be attributed to the difference in emission spectra between $^{99m}$Tc and $^{123}$I, which influences the detection and inclusion of scattered photons in calculations. The inclusion of counts from scattered photons decreases the estimated camera sensitivity by increasing the number of counts detected per known activity amount. Although the inclusion of counts from scattered photons also increases the estimates of activity, the influence of scattered photons in the calculation of camera sensitivity is greater. The relationship between the detection of scattered photons and camera sensitivity is dependent on the attenuation coefficient used. The relationship between the detection of scattered photons and activity estimates is also dependent on the attenuation coefficient used. This dependence is significant, when the attenuation coefficient used is not measured. Since the camera sensitivity for $^{123}$I studies is determined using the primary and high-energy photon emissions of $^{123}$I, the camera sensitivity is underestimated. This underestimation results in the underestimation of the activity estimates. This suggests that the underestimation of camera sensitivity has more influence than the inclusion of scattered photons in the estimation of activity estimates. This is supported by preliminary studies that show activity estimates determined using only the primary emission of $^{123}$I are overestimated, when using narrow-beam attenuation coefficient. This is because narrow-beam attenuation coefficients do not account for the detection of scattered photons. As a result, the detected scattered photons are treated as primary photons. The influence of scatter is apparent in these simulation results. Accordingly, scatter correction is applied to this simulated data. The method and results of scatter correction are discussed in chapter 7.

## 6.4 Clinical Relevance

The clinical application of modified conjugate imaging using the dedicated conjugate imaging system is striatal imaging with specific application to the diagnosis and management of Parkinsonism and schizophrenia. Several simulation studies are performed where the ROI size and attenuation coefficient are changed. The 19 pixels x 19 pixels ROI is deemed more clinically applicable as the ROIs drawn in clinical settings are more likely to be drawn larger than the physical dimensions of the striata due to limited spatial resolution. Although the broad-beam attenuation coefficient would be considered a better representative of attenuation coefficients determined from transmission data, the broad-beam attenuation coefficient chosen was considered too broad. Thus, the 19 pixels x 19 pixels ROI study using the narrow-beam attenuation coefficient is used to determine the technique's efficacy. For absolute activity estimation, the modified conjugate imaging technique could be used to diagnosis early- and late-stage Parkinson's disease patients with an accuracy of ±11%. This is limited to $^{123}$I radiopharmaceuticals. $^{99m}$Tc TRODAT could be used to diagnosis and differentiate between healthy and early-stage Parkinson's disease patients using the broad-beam attenuation coefficient with an accuracy of ±8%. Relative uptake ratio estimations are useful in monitoring the progression of Parkinson's disease and schizophrenia. The modified conjugate imaging could monitor the onset of disease, which is often presented as an uptake ratio of 2:1 with an accuracy of <10% for all radiopharmaceuticals.

# CHAPTER 7

## SCATTER CORRECTIONS

Approximately 20%-40% of all counts detected are from scattered photon interactions, primarily Compton scattering events (Jaszczak, Greer et al. 1984; Rosenthal, Cullom et al. 1995). The detection of these scattered events degrades spatial resolution and inflates counts. For quantitative single-photon emission studies this count inflation leads to an overestimation of activity. Thus, an accurate quantitative emission study has to correct for scatter detection in addition to effects of attenuation. Conjugate imaging, classic or the new modified technique presented in this dissertation, accounts for attenuation by using transmission data. Classic conjugate imaging corrects for attenuation by using the transmission data to estimate $e^{-\mu t}$ where t is the thickness of the patient or some part of the patient. Modified conjugate imaging accounts for attenuation by using the transmission data to estimate an effective attenuation coefficient. However, conjugate imaging does not correct for the effects of scatter detection. In chapter 6, Monte Carlo simulations using the modified conjugate imaging and a model of a dedicated conjugate imaging system are performed to evaluate the accuracy of activity estimates in each striatum. In the MCNP model, the striata are modeled as left and right spheres. Following the initial simulation, a scatter correction technique was applied to selected data sets from the simulation studies presented in chapter 6. This is done to improve the quantitative accuracy of the activity estimates in the left and right striata. The triple energy window (TEW) technique is the scatter correction technique used in this simulation study. The

results from this study are evaluated and compared with the simulated results reported in the previous chapter. This chapter discusses the triple energy window technique and reports the results of application of the technique in this setting. This chapter concludes with a discussion section that evaluates the accuracy of activity estimations determined using scatter-corrected data and of the clinical value of the combination of the TEW technique and conjugate imaging of two aligned sources.

## 7.1 Triple Energy Window

The triple energy window (TEW) technique was introduced in 1991 by Ogawa et. al. as a practical SPECT scatter technique (Ogawa, Harata et al. 1991). The TEW technique is an energy-distribution-based scatter correction technique. Energy-distribution-based scatter correction techniques use the number of counts in various energy windows to determine the amount of scatter in the photopeak window. TEW uses counts in two narrow energy windows adjacent to the photopeak window to estimate scatter in the photopeak window. Figure 7.1 illustrates example locations of the three energy windows used in TEW. TEW has become a popular scatter correction technique for SPECT studies using radiopharmaceuticals with secondary higher-energy photon emissions. TEW can account for downscatter in the photopeak from these higher-energy photons emissions, as well as scatter from primary photon emissions. The scatter estimate is defined as

$$C_{scat} = \left(\frac{C_{lower}}{w_s} + \frac{C_{upper}}{w_s}\right)\frac{w_m}{2} \qquad (7.1)$$

where $C_{lower}$ is the number of counts in the lower-energy window; $C_{upper}$ is the number of

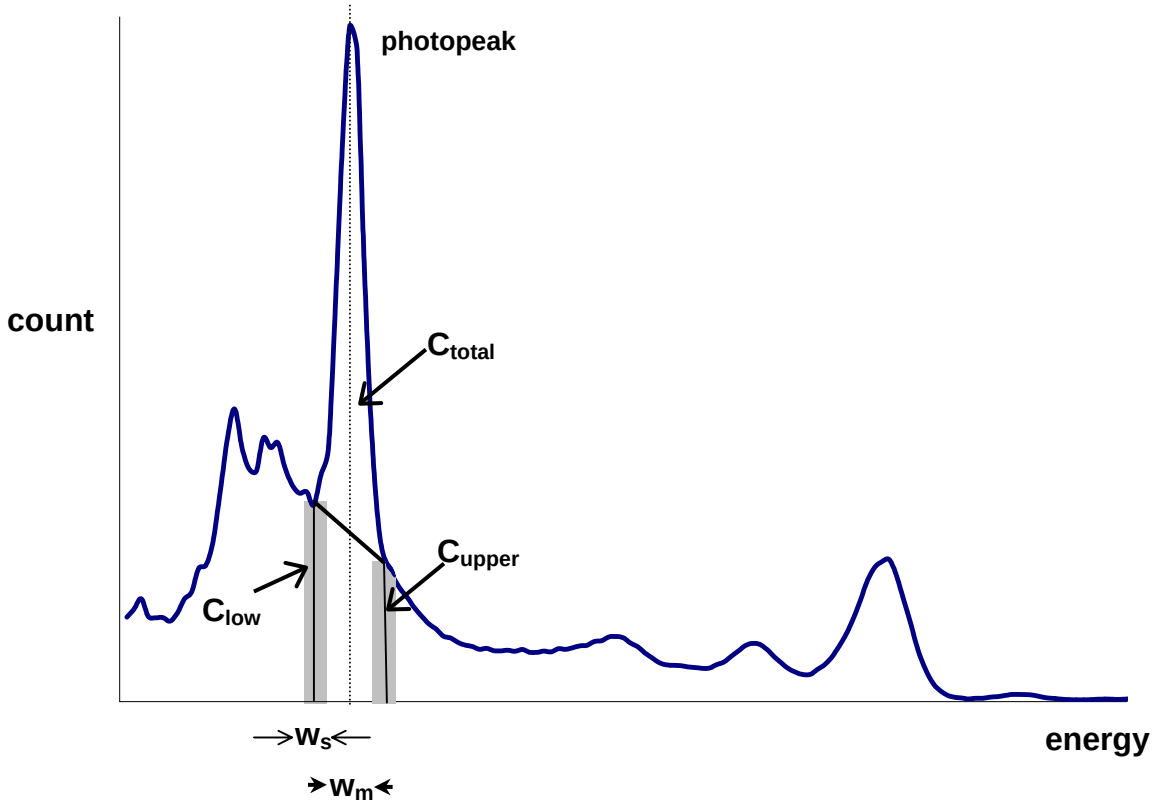



Figure 7.1. Locations of the energy windows used in standard TEW. $C_{lower}$ are the counts in the lower energy window with a width of $w_s$. The counts in the lower window are from scattered photons with initial energy of that of the primary photon emissions or high-energy photon emissions. $C_{upper}$ is the counts in the upper energy window with a width of $w_s$. The counts in the upper window are from downscattered high-energy photon emissions. $C_{total}$ are the counts in the photopeak energy window with a width of $w_m$.

counts in the upper-energy window; $w_s$ is the width of the sub-windows; $w_m$ is the width of the photopeak window, and $C_{scat}$ is the number of counts in the photopeak window that represent scattered photons. The scatter estimate is referred to as a trapezoidal approximation because the equation of the scatter estimate is that of the area of a trapezoid. The estimated scatter counts are then subtracted from the photopeak window to yield the primary photons

$$C_{prim} = C_{total} - C_{scat} \qquad (7.2)$$

where $C_{prim}$ is the counts of primary photons in the photopeak window (non-scattered photons) and $C_{total}$ is the counts of primary and scattered photons in the photopeak window (primary and scattered photons). The estimation and subtraction of scatter is performed for each pixel in each SPECT projection.

For radiopharmaceutical studies with primary and secondary higher-energy photon emissions, such as $^{123}$I imaging studies, the counts in the lower-energy window are from scattering of primary photons and scattered higher-energy photons. The upper-energy window contains counts from scattered high-energy photons. For $^{99m}$Tc imaging studies, the higher-energy sub-window is set to zero, as $^{99m}$Tc does not emit high-energy photons, i.e., photons with energies greater than 140 keV. Thus, the scatter estimate becomes

$$C_{scat} = \left(\frac{C_{lower}}{w_s}\right)\frac{w_m}{2} \qquad (7.3)$$

This scatter estimate is known as a triangular approximation as the number of scattered counts in the photopeak window is estimated by the area of a triangle.

The TEW technique is not object or imaging system dependent. It does not require object and imaging system calibration to remove the scatter component adequately. The triple energy window method is emission spectrum dependent. The effectiveness of the TEW scatter compensation technique has been reported in quantitative imaging studies using $^{123}$ I and $^{99m}$ Tc activity distributions (King, Long et al. 1991; Ogawa, Harata et al. 1991; Buvat, Benali et al. 1994; Buvat, Rodriguea-Villafuerte et al. 1995; Haynor, Kaplan et al. 1995; Narita, Eberl et al. 1996; Pollard, Lewellen et al. 1996; Hashimoto, Sasaki et al. 1999; Leong, O' Connor et al. 1999; Buvat, Soret et al. 2001; Moore, Kijewski et al. 2001; Soret, Koulibaly et al. 2003; Vines, Ichise et al. 2003). Since TEW can be applied as a post-processing technique and can be applied directly to projections, it has been used for planar studies. (Ichihara, Ogawa et al. 1993; Okada, Imal et al. 1999; Deplon, Ferrer et al. 2003). TEW can be performed before an attenuation correction technique is applied (Ichihara, Ogawa et al. 1993).

## 7.2 Monte Carlo Simulations

Chapter 6 describes and presents results from simulated conjugate imaging studies. Estimated activity uptakes for the left and right striatal spheres are determined using several combinations of ROI sizes and attenuation coefficients. The best estimates are determined when the 13 pixels x 13 pixels ROI and narrow-beam attenuation coefficient and the 19 pixels x 19 pixels ROI and broad-beam attenuation coefficient are

used. Accordingly, the scatter correction studies presented in this chapter report results, which are determined using these parameters.

Similar to chapter 6 methods, simulation of data acquisition requires two steps. The first step is to perform MCNP simulations. The second acquisition step is processing the Monte Carlo output into image array data. Once the image data arrays are generated, the image data were scatter-corrected using the TEW technique. Then the activities in the left and right striata are estimated from the scatter-corrected image data using the modified conjugate imaging technique. Data acquisition, the simulated geometry, and the application of the modified conjugate imaging technique are discussed in the methods section in chapter 6. The application of TEW to the simulated data sets is described in the following section. Two simulation studies are performed using $^{123}$I and $^{99m}$ Tc radiopharmaceuticals. The radiopharmaceuticals used are $^{123}$I β-CIT, $^{123}$I FP-CIT, $^{123}$I IBZM, and $^{99m}$Tc TRODAT. The percent uptakes of the administered radiopharmaceutical used in these studies are listed in Table 6.1. Narrow-beam and broad-beam attenuation coefficients are used in the $^{123}$I and $^{99m}$Tc studies. The selection of the attenuation coefficients is discussed in chapter 6. Two striatal ROI sizes are used in these studies. The first set of studies use a 13 pixels x 13 pixels ROI and a narrow-beam attenuation coefficient and the second use a 19 pixels x 19 pixels ROI and a broad-beam attenuation coefficient.

### 7.2.1 TEW Scatter Correction

Scatter correction is performed before conjugate imaging calculations are performed. Two scatter correction studies are performed. In the first study only the

emission data is scattered corrected. In the second study the camera sensitivity data and the emission data are scattered corrected. Typically, the lower and upper energy windows are narrow and abut the photopeak window to ensure that the scatter distribution in these side windows closely approximates the scatter distribution in the photopeak window. Unfortunately, narrow windows translate to low counts, which result in noisy scatter estimations (King and Farncombe 2003). In the $^{123}$I studies, five sets of energy windows are investigated. Table 7.1 lists the upper and lower energy windows used in the $^{123}$I studies. In study one, larger lower window of 12 keV lower energy window and a 5 keV upper energy window are used. Study 2 uses energy windows based on Monte Carlo spectral studies. Monte Carlo studies are performed to analyze the 159 keV primary component and the high-energy component of the $^{123}$I spectrum. Study 3 uses a 5 keV and a 5 keV upper energy window. Study 4 uses overlapping energy windows. Study 5 uses a 12 keV lower energy window and no upper energy window.

Table 7.1. Scatter energy windows for $^{123}$I studies.

| Study | Lower Energy Window | Upper Energy Window |
|---|---|---|
| **1** | **130-142** | **175-180** |
| **2** | **130-140** | **185-190** |
| **3** | **137-142** | **175-180** |
| **4** | **139-144** | **173-178** |
| **5** | **130-142** | **0** |

Figure 7.2 is the emission spectral data generated from the MCNP simulations of the $^{123}I$ emissions. The primary and high-energy components are graphed individually. The backscatter peak for the 529 keV photon emissions smears into the upper bound of photopeak window. (A backscattered 529 photon has a energy of 173 keV. The upper bound of the photopeak in this analysis is the 170-175 keV bin as the energy of the spectrum was binned into 5 keV bins.) The backscatter peak is relatively symmetric with a peak at 180-185 keV. As a result, the counts in the 170-175 keV window from the high energy emissions are equal to the total counts in the 185-190 keV window, which are from high energy emissions. Thus, the 185-190 keV window is considered to be a good representation of the high-energy scatter contribution in the 170-175 keV. To investigate the significance of the upper energy window, the last energy window set contains only an abutting lower energy window that is 13 keV wide.

For the $^{99m}$ Tc studies the upper energy window is omitted. The lower energy window is based on MCNP spectral data study of 140 keV photon emission of $^{99m}$ Tc in water. The width and placement of the lower energy window is varied. Figure 7.3 is the spectral data generated from the MCNP simulations of the $^{99m}$ Tc emissions. Table 7.2 lists the windows used in the $^{99m}$ Tc study. The lower energy window 121-126 keV used is based on previous studies (Zaidi 1996). An abutting energy window of 114-126 and an overlapping energy window of 123-128 keV are also used.

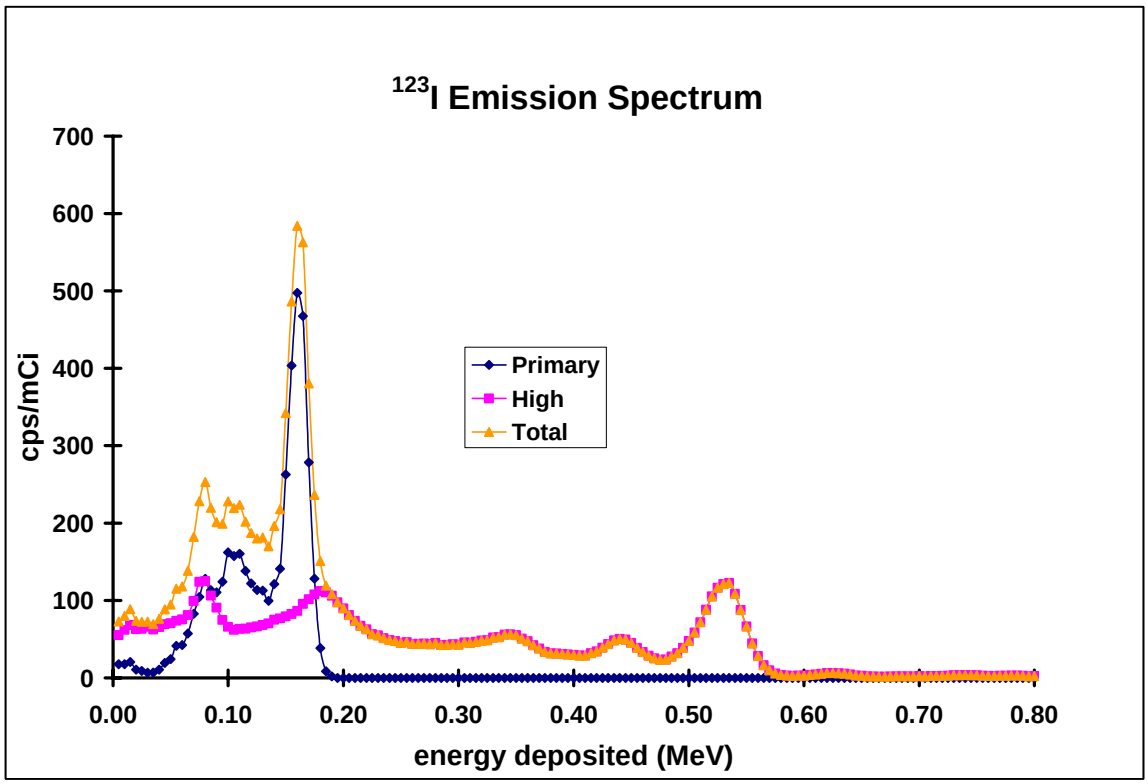



Figure 7.2. $^{123}$I emission spectrum in water. $^{123}$I emission spectrum in water as detected by a gamma camera from the conjugate imaging system simulated using MCNP 4c. The gamma camera was simulated with an energy resolution of 12% full width half maximum at 159 keV. The curve entitled Total represents the complete $^{123}$I spectrum. The 159 keV photon emissions are represented by the Primary curve. The high-energy photon emissions are represented by the High curve. It is apparent from the graph that the high-energy photon emissions are responsible for the counts in the upper region of the Total spectrum. There is a symmetric curve about 180 keV in the high-energy photon spectrum. This curve is due to the backscattering of the 529 keV photon emissions. The selection of 185-190 keV scatter window was based on this backscatter curve. Due to the symmetric nature of the curve, the counts in the 185-190 window closely approximates the scatter counts in the corresponding window of 170-175 keV, which is inside the photopeak window.

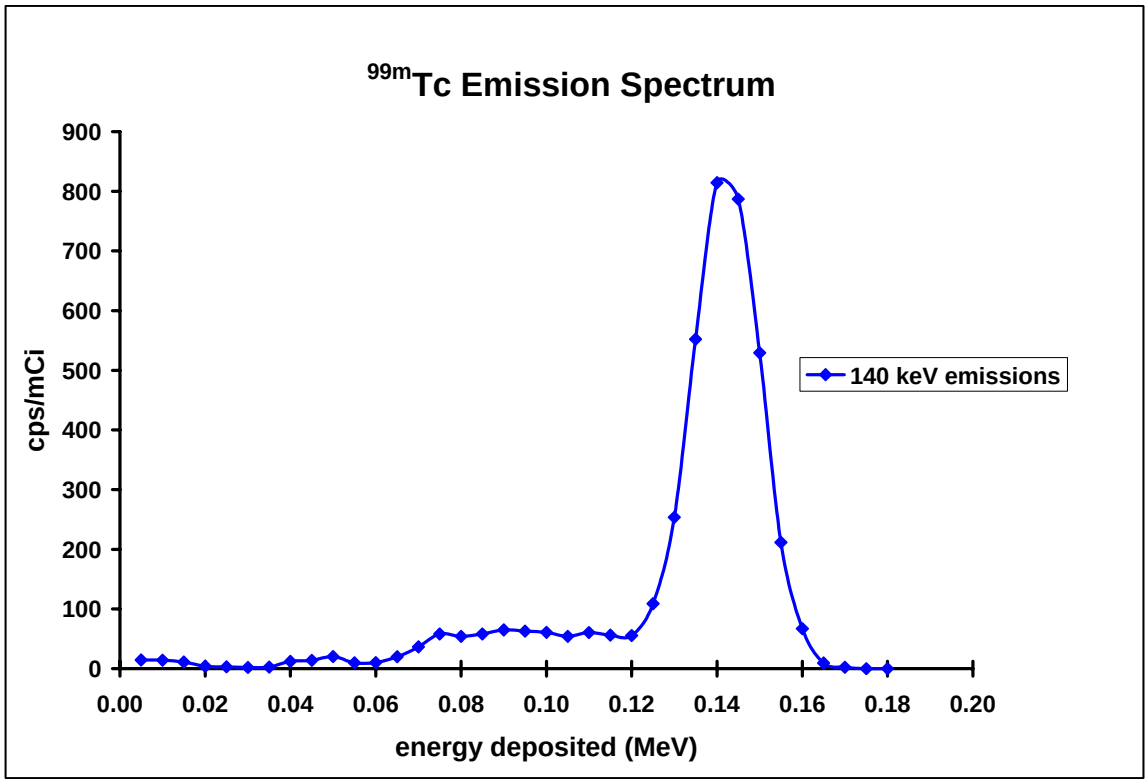



Figure 7.3. $^{99m}$Tc photon emissions in water. $^{99m}$Tc photon emissions in water as detected by a gamma camera from the conjugate imaging system simulated using MCNP 4c. The gamma camera is simulated with an energy resolution of 12% full width half maximum at 140 keV.

Table 7.2. Scatter energy windows for $^{99m}$Tc studies.

| Study | Lower Energy Window | Upper Energy Window |
|---|---|---|
| **1** | **121-126** | **none** |
| **2** | **114-126** | **none** |
| **3** | **123-128** | **none** |

## 7.3 Results

### 7.3.1 $^{123}$I Radiopharmaceutical Studies

The results presented in the following sections are determined using TEW scatter energy windows listed in tables 7.2 and 7.3 for the $^{123}$I and $^{99m}$Tc studies, respectively. The ROI and attenuation coefficient combination used are 13 pixels x 13 pixels ROI and narrow-beam attenuation coefficient and 19 pixels x 19 pixels ROI and broad-beam attenuation coefficients. Results from simulation studies performed with different combinations of ROI sizes and attenuation coefficients can be found in the Appendix B.

#### *7.3.1.1 Scatter-Corrected Emission Only Study*

Tables 7.3-7.12 lists the percent errors associated with the conjugate imaging calculations using TEW scatter corrected emission data from selected $^{123}$I radiopharmaceuticals. The application of TEW to the emission data results in the underestimation of activity estimates for the left and right striatum. Tables 7.3-7.7 list percent errors from studies that used a 13 pixels x 13 pixels ROI and narrow-beam attenuation coefficient. The percent errors for the activity estimates in the left and right striata are approximately equal for each activity uptake ratio and each scatter

Table 7.3. Percent Error in Striatal Activity Estimates; Lower:130-142, Upper:175-180

| ROI: 13 pixels x 13 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -25.86% | -25.66% | -26.66% | -25.37% | -27.15% | -24.55% |
| $^{123}$I FP-CIT | -24.74% | -25.38% | -25.54% | -24.79% | -26.02% | -23.09% |
| $^{123}$I IBZM | -23.75% | -24.89% | -24.58% | -24.06% | -25.07% | -21.52% |

Narrow-beam attenuation coefficient used: 0.1481 $cm^{-1}$

Table 7.4. Percent Error in Striatal Activity Estimates; Lower:130-142, Upper: 185-190

| ROI: 13 pixels x 13 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -21.70% | -21.76% | -22.11% | -23.20% | -22.33% | -27.38% |
| $^{123}$I FP-CIT | -20.50% | -20.65% | -20.92% | -20.98% | -21.16% | -21.97% |
| $^{123}$I IBZM | -19.44% | -19.65% | -19.91% | -19.25% | -20.16% | -17.96% |

Narrow-beam attenuation coefficient used: 0.1481 $cm^{-1}$

Table 7.5. Percent Error in Striatal Activity Estimates; Lower:137-142, Upper:175-180

| ROI: 13 pixels x 13 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -25.74% | -27.17% | -26.74% | -26.87% | -27.33% | -25.96% |
| $^{123}$I FP-CIT | -25.00% | -26.95% | -26.00% | -26.43% | -26.57% | -24.77% |
| $^{123}$I IBZM | -24.34% | -26.60% | -25.34% | -25.90% | -25.95% | -23.81% |

Narrow-beam attenuation coefficient used: 0.1481 $cm^{-1}$

Table 7.6. Percent Error in Striatal Activity Estimates; Lower:139-144, Upper: 173-178

| ROI: 13 pixels x 13 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -29.69% | -32.97% | -30.46% | -32.63% | -30.92% | -31.57% |
| $^{123}$I FP-CIT | -29.86% | -32.51% | -30.67% | -31.80% | -31.14% | -29.52% |
| $^{123}$I IBZM | -29.89% | -32.11% | -30.68% | -31.08% | -31.16% | -28.04% |

Narrow-beam attenuation coefficient used: 0.1481 $cm^{-1}$

Table 7.7. Percent Error in Striatal Activity Estimates; Lower:130-142, Upper: 000-000

| ROI: 13 pixels x 13 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -21.81% | -15.79% | -21.49% | -20.27% | -21.30% | -33.72% |
| $^{123}$I FP-CIT | -20.51% | -20.72% | -20.71% | -21.90% | -20.81% | -25.34% |
| $^{123}$I IBZM | -19.33% | -19.55% | -19.57% | -19.82% | -19.68% | -20.49% |

Narrow-beam attenuation coefficient used: 0.1481 $cm^{-1}$

correction study. Although the percent errors for the left and right activity estimates are close in magnitude, the percent errors do vary. The largest relative difference between percent errors for the left and right activity estimates is observed in the 5:1 uptake ratio. The percent errors for the left striatum increase with an increase in the activity uptake ratio (1:1 – 5:1). The changes in magnitude in the percent error for the right activity estimate are dependent on the radiopharmaceutical and scatter energy windows used. For

the studies using the 1) 130-142 keV and 175-180 keV, 2) 137-142 keV and 175-180 keV and 3) 139-144 keV and 173-178 keV scatter energy windows, the percent errors for the activity estimates in the right striatuu decrease. The studies using the 1) 130-142 keV and 185-190 keV and 2) 130-142 keV and 000-000 keV scatter energy window produce similar percent errors, where the percent errors for the right activity estimates increase with the exception of $^{123}$I IBZM and scatter energy windows of 130-142 keV and 185-190 keV. The most accurate activity estimates, defined by magnitude of percent error and relative difference between the percent error for the left and right activity estimates, are produced from the study using lower energy window 130-142 keV and high-energy window of 185-190 keV. The least accurate activity estimates are produced from the study using lower energy window of 139-144 keV and upper energy window of 173-178 keV.

Tables 7.8-7.12 list the percent errors from studies using a 19 pixels x 19 pixels ROI and a broad-beam attenuation coefficient 0.12 cm$^{-1}$. The percent errors in this study are larger than the 13 pixelss x 13 pixelss ROI study, with the exception of the percent errors associated with the$^{123}$I β–CIT 5:1 uptake ratio. The differences in percent errors with respect to the radiopharmaceuticals in a given scatter energy window set are larger in this study. The percent errors for the left striatum decrease as the activity uptake ratios increase for all radiopharmaceuticals and all scatter energy window studies. The changes in direction (increase or decrease) and magnitudes of percent errors for the right striatum are dependent on the radiopharmaceutical and scatter energy window study. The magnitudes of changes in the percent errors associated with the activity estimate in right

Table 7.8. Percent Error in Striatal Activity Estimates; Lower:130-142, Upper:175-180

| ROI: 19 pixels x 19 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -28.31% | -24.02% | -26.86% | -22.59% | -25.96% | -18.56% |
| $^{123}$I FP-CIT | -27.72% | -26.20% | -26.24% | -26.99% | -25.37% | -29.37% |
| $^{123}$I IBZM | -26.94% | -27.40% | -25.53% | -29.67% | -24.66% | -36.37% |

Broad-beam attenuation coefficient used: 0.12 $cm^{-1}$

Table 7.9. Percent Error in Striatal Activity Estimates; Lower:130-142, Upper: 185-190

| ROI: 19 pixels x 19 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -25.10% | -20.11% | -23.00% | -20.57% | -21.73% | -21.47% |
| $^{123}$I FP-CIT | -24.07% | -21.61% | -22.01% | -23.55% | -20.76% | -29.38% |
| $^{123}$I IBZM | -23.08% | -22.39% | -21.10% | -25.46% | -19.86% | -34.47% |

Broad-beam attenuation coefficient used: 0.12 $cm^{-1}$

Table 7.10. Percent Error in Striatal Activity Estimates; Lower:137-142, Upper:175-180

| ROI: 19 pixels x 19 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -25.94% | -27.14% | -25.28% | -26.06% | -24.87% | -22.74% |
| $^{123}$I FP-CIT | -26.41% | -29.01% | -25.77% | -29.76% | -25.35% | -31.78% |
| $^{123}$I IBZM | -26.55% | -30.15% | -25.90% | -32.21% | -25.52% | -38.39% |

Broad-beam attenuation coefficient used: 0.12 $cm^{-1}$

Table 7.11. Percent Error in Striatal Activity Estimates; Lower:139-144, Upper: 173-178

| ROI: 19 pixels x 19 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -32.21% | -30.66% | -31.70% | -26.94% | -31.34% | -15.75% |
| $^{123}$I FP-CIT | -32.41% | -33.14% | -31.94% | -32.10% | -31.60% | -28.76% |
| $^{123}$I IBZM | -32.52% | -34.86% | -31.99% | -35.59% | -31.67% | -37.83% |

Broad-beam attenuation coefficient used: 0.12 $cm^{-1}$

Table 7.12. Percent Error in Striatal Activity Estimates; Lower:130-142, Upper: 000-000

| ROI: 19 pixels x 19 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -27.65% | -12.97% | -23.71% | -18.39% | -21.45% | -34.23% |
| $^{123}$I FP-CIT | -24.82% | -21.89% | -22.15% | -25.68% | -20.51% | -36.96% |
| $^{123}$I IBZM | -23.37% | -22.38% | -20.77% | -26.99% | -19.15% | -40.58% |

Broad-beam attenuation coefficient used: 0.12 $cm^{-1}$

striatum are significantly larger than the changes in the percent errors for the activity estimate in left striatum. Similar to the 13 pixels x 13 pixels ROI study, the largest differences in percent errors between the left and right striata are for the 5:1 activity uptake ratio. The percent errors from studies using the scatter energy windows 139-144 keV and 173-178 keV are on average larger than the percent errors from the other energy window studies. Studies using the 130-142 keV and 185-190 keV energy windows

produce the most accurate activity estimates as a whole. It is important to note that the percent errors from both ROI studies are on the same magnitude.

#### *7.3.1.2 Scatter-Corrected Emission and Camera Sensitivity Study*

Tables 7.13-7.22 list percent errors associated with activity estimates determined using scattered corrected emission and camera sensitivity data. Tables 7.13-7.17 list the percent errors from studies that used the 13 pixels x13 pixels ROI and narrow-beam attenuation coefficient 0.1481 $cm^{-1}$. The percent errors for the uptake ratios are significantly smaller than the corresponding scatter correction study using the same energy windows but applied only to the emission data. Although the percent errors are smaller, the differences in percent errors among the radiopharmaceuticals and scatter energy window sets are larger. The percent errors for the left striatum increase for all scatter energy windows except the scatter energy window study using the lower energy window 130-142 keV only. The percent errors for the activity estimate for the right striatum do not follow a trend but instead are dependent on the radiopharmaceutical and scatter energy windows. The study using the lower energy window of 130-142 keV only produces the worst percent errors. The most accurate activity estimates, defined by the magnitude of percent error and relative difference between the percent error for the left and right activity estimates, are produced from the study using lower energy window 137-142 keV and high-energy window of 175-180 keV.

Table 7.13. Percent Error in Striatal Activity Estimates; Lower:130-142, Upper: 175-180

| ROI: 13 pixels x 13 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -2.52% | -2.26% | -3.57% | -1.88% | -4.22% | -0.81% |
| $^{123}$I FP-CIT | -1.05% | -1.89% | -2.10% | -1.12% | -2.74% | 1.12% |
| $^{123}$I IBZM | 0.26% | -1.24% | -0.84% | -0.16% | -1.48% | 3.18% |

Narrow-beam attenuation coefficient used: 0.1481 $cm^{-1}$

Table 7.14. Percent Error in Striatal Activity Estimates; Lower:130-142, Upper: 185-190

| ROI: 13 pixels x 13 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -3.75% | -3.83% | -4.26% | -5.59% | -4.52% | -10.73% |
| $^{123}$I FP-CIT | -2.27% | -2.46% | -2.79% | -2.87% | -3.09% | -4.08% |
| $^{123}$I IBZM | -0.98% | -1.23% | -1.55% | -0.75% | -1.86% | 0.84% |

Narrow-beam attenuation coefficient: 0.1481$cm^{-1}$

Table 7.15. Percent Error in Striatal Activity Estimates Lower:137-142, Upper: 175-180

| ROI: 13 pixels x 13 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -1.55% | -3.45% | -2.88% | -3.06% | -3.67% | -1.84% |
| $^{123}$I FP-CIT | -0.57% | -3.16% | -1.89% | -2.47% | -2.66% | -0.26% |
| $^{123}$I IBZM | 0.30% | -2.70% | -1.03% | -1.77% | -1.83% | 1.00% |

Narrow-beam attenuation coefficient: 0.1481$cm^{-1}$

Table 7.16. Percent Error in Striatal Activity Estimates; Lower:139-144, Upper: 173-178

| ROI: 13 pixels x 13 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -0.30% | -4.95% | -1.40% | -4.47% | -2.04% | -2.97% |
| $^{123}$I FP-CIT | -0.54% | -4.31% | -1.70% | -3.29% | -2.36% | -0.07% |
| $^{123}$I IBZM | -0.59% | -3.73% | -1.71% | -2.28% | -2.39% | 2.04% |

Narrow-beam attenuation coefficient: 0.1481cm$^{-1}$

Table 7.17. Percent Error in Striatal Activity Estimates; Lower:130-142, Upper: 000-000

| ROI: 13 pixels x 13 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -14.56% | -7.99% | -14.21% | -12.88% | -14.00% | -27.57% |
| $^{123}$I FP-CIT | -11.88% | -12.12% | -12.10% | -13.42% | -12.22% | -17.24% |
| $^{123}$I IBZM | -10.58% | -10.82% | -10.84% | -11.12% | -10.97% | -11.86% |

Narrow-beam attenuation coefficient: 0.1481cm$^{-1}$

Tables 7.18 -7.22 list the percent errors from studies that used the 19 pixels x19 pixels ROI and broad-beam attenuation coefficient 0.12 cm$^{-1}$. The percent errors in this study are also smaller than the corresponding study in which only the emission data are scatter

Table 7.18. Percent Error in Striatal Activity Estimates; Lower:130-142, Upper: 175-180

| ROI: 19 pixels x 19 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -5.74% | -0.11% | -3.83% | 1.78% | -2.66% | 7.08% |
| $^{123}$I FP-CIT | -4.97% | -2.97% | -3.02% | -4.00% | -1.88% | -7.13% |
| $^{123}$I IBZM | -3.95% | -4.55% | -2.09% | -7.53% | -0.95% | -16.34% |

Broad-beam attenuation coefficient used: 0.12 $cm^{-1}$

Table 7.19. Percent Error of Striatal Uptakes; Lower:130-142, Upper: 185-190

| ROI: 19 pixels x 19 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -7.94% | -1.80% | -5.35% | -2.36% | -3.79% | -3.48% |
| $^{123}$I FP-CIT | -6.67% | -3.64% | -4.13% | -6.03% | -2.59% | -13.20% |
| $^{123}$I IBZM | -5.45% | -4.60% | -3.01% | -8.37% | -1.49% | -19.45% |

Broad-beam attenuation coefficient: 0.12$cm^{-1}$

Table 7.20. Percent Error in Striatal Activity Estimates; Lower:137-142, Upper: 175-180

| ROI: 19 pixels x 19 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -1.82% | -3.42% | -0.95% | -1.98% | -0.40% | 2.42% |
| $^{123}$I FP-CIT | -2.45% | -5.89% | -1.59% | -6.88% | -1.03% | -9.56% |
| $^{123}$I IBZM | -2.62% | -7.41% | -1.77% | -10.13% | -1.26% | -18.32% |

Broad-beam attenuation coefficient: 0.12$cm^{-1}$

Table 7.21. Percent Error in Striatal Activity Estimates; Lower:139-144, Upper: 173-178

| ROI: 19 pixels x 19 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -3.88% | -1.68% | -3.15% | 3.59% | -2.64% | 19.47% |
| $^{123}$I FP-CIT | -4.16% | -5.20% | -3.50% | -3.72% | -3.01% | 1.02% |
| $^{123}$I IBZM | -4.32% | -7.64% | -3.56% | -8.67% | -3.12% | -11.85% |

Broad-beam attenuation coefficient: 0.12cm$^{-1}$

Table 7.22. Percent Error in Striatal Activity Estimates; Lower:130-142, Upper: 000-000

| ROI: 19 pixels x 19 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Radiopharmaceuticals | | | | | | |
| $^{123}$I β–CIT | -20.94% | -4.90% | -16.63% | -10.83% | -14.17% | -28.14% |
| $^{123}$I FP-CIT | -16.66% | -13.41% | -13.71% | -17.61% | -11.88% | -30.12% |
| $^{123}$I IBZM | -15.06% | -13.96% | -12.17% | -19.07% | -10.38% | -34.13% |

Broad-beam attenuation coefficient: 0.12cm$^{-1}$

corrected. The percent errors for the left striatum decrease, while percent errors for the right striatum increase as the activity uptake ratios increase for all radiopharmaceuticals and scatter energy windows. The magnitudes of the percent errors in the 19 pixels x 19 pixels ROI study are higher than the percent errors in the 13 pixels x 13 pixels ROI study. The study using only a lower scatter energy window of 130-142 keV produces the least accurate activity estimates for all radiopharmaceuticals. There is no one scatter energy

window set that produces the best results for all three activity uptake ratios and for all radiopharmaceuticals. Reasonable estimates for the 1:1 and 2:1 activity uptake ratios are determined for all scatter energy window sets. For the 5:1 activity uptake ratio, the accuracy of the activity estimates is dependent on the scatter energy window set. The study with scatter energy windows 137-142 keV and 175-180 keV produces the most accurate activity estimates for $^{123}$I β-CIT uptake. The study with scatter energy windows 139-144 keV and 173-178 keV produce the most accurate activity estimates for $^{123}$I FP-CIT and $^{123}$I IBZM uptake.

### 7.3.2 $^{99m}$Tc Radiopharmaceutical Study

#### *7.3.2.1 Scatter-Corrected Emission Only Study*

Tables 7.23-7.24 list the percent errors from studies using scatter-corrected emission data only. Table 7.23 lists the percent errors associated with activity estimates determined using 13 pixels x 13 pixels ROI and narrow-beam attenuation coefficient 0.1526 cm$^{-1}$. Percent errors for the left striatum decreas, while the percent errors for the right striatum increase, as the activity uptake ratios increase. The study using the lower scatter energy window of 114-126 keV produces the most accurate activity estimates for both striata. The magnitude of increases in the percent errors for the right striatum is larger than the magnitude of decrease in the percent errors for the left striatum.

Table 7.24 lists the percent errors for studies using the 19 pixels x 19 pixels ROI and broad-beam attenuation coefficient of 0.12 cm$^{-1}$. Similar to the 13 pixels x 13 pixels ROI study, the percent errors for the activity estimates in the left striatum decrease, while the percent errors for the right striatum increase, as the activity ratio uptakes increase.

Table 7.23. $^{99m}$Tc TRODAT Percent Error in Striatal Activity Estimates

| ROI: 13 pixels x 13 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Scatter Energy Window | | | | | | |
| 121-126 keV | -4.27% | -7.10% | -4.16% | -8.51% | -4.08% | -12.63% |
| 114-126 keV | -3.36% | -3.50% | -2.67% | -4.50% | -2.25% | -7.46% |
| 123-128 keV | -11.23% | 2.31% | -10.84% | -2.12% | -10.59% | -15.28% |

Narrow-beam attenuation coefficient: 0.1526 $cm^{-1}$

Table 7.24. $^{99m}$Tc TRODAT Percent Error in Striatal Activity Estimates

| ROI: 19 pixels x 19 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Scatter Energy Window | | | | | | |
| 121-126 keV | -11.71% | -12.66% | -8.09% | -19.99% | -5.88% | -41.78% |
| 114-126 keV | -10.95% | -9.27% | -6.73% | -16.16% | -4.19% | -36.78% |
| 123-128 keV | -20.04% | -1.10% | -15.62% | -10.96% | -12.91% | -40.35% |

Broad-beam attenuation coefficient: 0.12 $cm^{-1}$

However, the magnitudes of the percent errors are significantly larger in the 19 pixels x 19 pixels ROI study. The most accurate activity estimates are determined using the 114-126 keV scatter energy window.

*7.3.2.2 Scatter-Corrected Emission and Camera Sensitivity Study*

Tables 7.25-7.26 list the percent errors from studies using scatter-corrected emission and camera sensitivity data. Table 7.25 lists the percent errors associated with activity estimates determined using 13 pixels x 13 pixels ROI and narrow-beam attenuation coefficient 0.1526 $cm^{-1}$. The activity estimates in this study are more accurate than the activity estimates determined using scatter-corrected emission data only. The exception is the study using the scatter energy window 123-128 keV for activity uptake ratios 1:1 and 2:1. For the studies using the scatter energy windows 121-126 keV, percent errors for the left and right striata increase as the activity uptake ratios increase. For the study using the scatter energy window 114-126 keV, the percent errors for the left striatum increase, while the percent error for the right striatum decrease for activity ratios 1:1 and 2:1. For the study using the scatter energy window 123-128 keV, the percent errors for the left striatum increase, while the percent errors for the right striatum decrease as the activity uptake ratios increase. The magnitudes of change in the percent errors for the right striatum are larger than those of the left striatum, especially for $^{123}I$ IBZM. The differences in the percent errors among the three studies are not as great as the differences in the studies using only scatter-corrected emission data. The study using the scatter energy window of 114-126 keV produces the most accurate activity estimates.

Table 7.26 lists the percent errors for studies using the 19 pixels x 19 pixels ROI and broad-beam attenuation coefficient of 0.12 $cm^{-1}$. The magnitudes of percent errors are less in this 19 pixels x 19 pixels ROI study than in the corresponding study using scatter corrected emission data only. The percent errors for the activity estimates in the left striatum decrease and the percent errors for the right striatum increase as the activity

Table 7.25. $^{99m}$Tc TRODAT Percent Error in Striatal Activity Estimates

| ROI: 13 pixels x 13 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Scatter Energy Window | | | | | | |
| 121-126 keV | 3.09% | 0.03% | 3.20% | -1.49% | 3.29% | -5.92% |
| 114-126 keV | 1.59% | 1.44% | 2.31% | 0.39% | 2.75% | -2.73% |
| 123-128 keV | 0.92% | 16.31% | 1.36% | 11.28% | 1.64% | -3.68% |

Narrow-beam attenuation coefficient: 0.1526 $cm^{-1}$

Table 7.26. $^{99m}$Tc TRODAT Percent Error in Striatal Activity Estimates

| ROI: 19 pixels x 19 pixels | Striatal Uptake Ratios | | | | | |
|---|---|---|---|---|---|---|
| Percent Error | 1:1 | | 2:1 | | 5:1 | |
| | Left Striatum | Right Striatum | Left Striatum | Right Striatum | Left Striatum | Right Striatum |
| Scatter Energy Window | | | | | | |
| 121-126 keV | -4.93% | -5.95% | -1.03% | -13.85% | 1.35% | -37.31% |
| 114-126 keV | -6.39% | -4.62% | -1.96% | -11.87% | 0.71% | -33.55% |
| 123-128 keV | -9.10% | 12.43% | -4.07% | 1.22% | -1.00% | -32.18% |

Broad-beam attenuation coefficient: 0.12 $cm^{-1}$

uptake ratios increase. The most accurate activity estimates for the 1:1 and 2:1 uptake ratios are determined using the 114-126 keV scatter energy window. The most accurate activity estimates for the 5:1 uptake ratio is determined using the 123-128 keV scatter energy window.

## 7.4 Discussion

The triple energy window (TEW) technique is the scatter correction technique used to scatter correct data used in the modified conjugate imaging studies. It is chosen because of its applicability to planar images, its treatment of high-energy photon emission downscatter and easy implementation into the clinic. Conventional lower and upper scatter energy windows have been narrow and abut the photopeak window (Ogawa, Harata et al. 1991; Ichihara, Ogawa et al. 1993; Rosenthal, Cullom et al. 1995; Narita, Eberl et al. 1996; Okada, Imal et al. 1999; Deplon, Ferrer et al. 2003; King and Farncombe 2003; Soret, Koulibaly et al. 2003). In addition to the standard scatter energy windows, a couple of unconventional scatter energy window sets are used in these studies. These are not equal in width and not adjacent to the photopeak window. A total of five energy window sets are used to scatter correct the image data in the $^{123}$I studies. Three energy windows were used in the $^{99m}$Tc study. Scatter correction techniques are usually applied to emission data only. In these studies, two scatter correction studies are compared; one in which scatter correction is applied only to the emission data and the second study in which scatter correction is applied to on the emission data and the camera sensitivity data. The effects of scatter correction on the conjugate imaging calculations are evaluated. Conjugate imaging calculations are performed with a 13 pixels x 13 pixels ROI and a narrow-beam attenuation coefficient and a 19 pixels x 19 pixels ROI and broad-beam attenuation coefficient were used for the $^{123}$I and $^{99m}$Tc studies.

It was anticipated that the application of scatter correction would further improve the accuracy of the estimations of activity in the left and right striatum. However, the magnitude of improvement is dependent on 1) which data sets scatter correction are

applied; 2) which scatter energy windows are used; 3) the size of the ROI; and 4) the radiopharmaceutical. Activity estimates determined using scatter-corrected emission and scatter-corrected camera sensitivity data are more accurate than activity estimates determined with scatter-corrected emission data only. Scatter correcting the emission data decreases the activity estimates, while scatter correcting the camera sensitivity counters this decrease by increasing activity estimates due to the increased camera sensitivity. Scattered corrected camera sensitivity increases activity estimates because a smaller number of counts now represent the known amount of activity, which translated into larger activity estimates.

Although the scatter-corrected emission and camera sensitivity data provide more accurate activity estimates, the scatter energy windows do influence the degree of accuracy. The scatter energy window selection is influenced by the ROI size and biodistribution of the radiopharmaceuticals. The accuracy of the activity estimates changes with ROI size because of the inclusion of more scatter. For radiopharmaceuticals, like $^{123}$I β-CIT, with large brain to striatal activity concentration ratio, the activity estimates in the 19 pixels x 19 pixels ROI are, in general, not as underestimated as activity estimates determined using radiopharmaceuticals with small head to striatal activity concentration ratio, like $^{123}$I FP-CIT, $^{123}$I IBZM, and $^{99m}$Tc TRODAT. For larger brain to striatal activity concentration ratios, a large fraction of counts due to scattered photons are from brain activity. Scatter correction removes these counts. However, for smaller brain to striatal activity concentration ratio, the fraction of counts from scattered photons from brain activity is small. As a result, scatter correction removes more primary counts. This is especially apparent in the 2:1 and 5:1 uptake ratios

where the overall activity amount is less. This is most likely compounded by the use of a too broad attenuation coefficient, which removes too large a fraction of counts.

Several studies are performed with various parameters. The best scatter correction results are produced when the 13 pixels x 13 pixels ROI, narrow-beam attenuation coefficient, and scatter corrected emission and camera sensitivity data are used. Although all scatter energy windows produce reasonable percent errors, the best scatter energy windows are 130-142 keV and 185-190 keV for uptake ratios 1:1 and 2:1. This is based on magnitude and relative difference of percent error between the left and right activity estimates. The larger lower scatter energy window of 130-142 keV provides a better scatter estimate because it introduces less noise due to the larger number of counts. The upper energy window of 185-190 keV is a better estimation of the high-energy scatter because unlike the 175-180 keV energy window it contains only scattered counts. The best scatter energy window for the 5:1 uptake ratio is the scatter energy windows 139-144 keV and 173-178 keV. For the $^{99m}$Tc studies, the wider lower energy window 114-121 keV provides the most accurate activity estimates. In the wider window of 114-126 keV, the signal to noise ratio is smaller than 121-126 keV window providing for better estimation of scatter.

However, the use of the 13 pixels x 13 pixels ROI and narrow-beam attenuation coefficient does not model adequately the clinical setup. The ROI drawn in the clinic will most likely be drawn around the striatum highlighted from radiopharmaceutical. Due to blurring the striatum projected on the image will be larger than it physical size. This indicates that the ROI will not have the dimensions of the physical size of the striatum. The attenuation coefficient determined from the flood data will most likely be closer to

the value of the broad-beam attenuation coefficient even with scatter correction. Thus, the results determined from the 19 pixels x 19 pixels ROI and broad-beam attenuation coefficient most accurately model the clinical setting. The broad attenuation coefficient used in these studies overcompensates by removing too many counts. The activity estimates determined using these parameters are less accurate than the 13 pixels x 13 pixels ROI study, particularly for the striatum containing less activity (right striatum). Although the activities are less accurate, the percent errors are reasonable for the 1:1 and 2:1 uptake ratio for all radiopharmaceuticals and most scatter energy window sets. The percent errors for the activity estimates for both striata for the 5:1 uptake ratio are within 10% for the $^{123}$I β-CIT and $^{123}$I FP-CIT for most scatter energy windows.

## 7.5 Clinical Relevance

The application of TEW on emission data and camera sensitivity data improves the accuracy of the activity estimates for the left and right striata. The percent errors associated with the activity estimates for the left and right striata in the $^{123}$I β-CIT and $^{123}$I FP-CIT studies for the 1:1, 2:1, and 5:1 uptake ratios suggest that the modified conjugate imaging in conjunction with TEW is a feasible quantitative estimation technique for early to late Parkinson's disease striatal studies. $^{123}$I IBZM and $^{99m}$Tc TRODAT provide reasonable results for the healthy and early Parkinson's disease patients.

# CHAPTER 8

# CONCLUSIONS AND FUTURE WORK

## 8.1 Conclusions

In this dissertation, the development and characterization of conjugate imaging of two aligned activity distributions embedded in an attenuating medium, with specific application to the quantification of activity uptake in the striata, were reported. The actualization of this research involved the completion of six tasks. Tasks one two and three involved the model and general application of the technique. Tasks four, five and six were related to the specific application of striatal imaging and neurodegenerative diseases.

The development and assessment of conjugate imaging of the two aligned activity distributions with respect to the techniques general applicability were addressed by tasks one, two, and three. Task one was the derivation of a tractable mathematical model for conjugate imaging of two aligned activity distributions. Other extensions of conjugate imaging have been developed, but none have provided a practical means of estimating accurately two distinct aligned distributions. Task two was an error analysis of the mathematical model. The error analysis demonstrated the model was sensitive to the accuracy of the measured input parameters and the activity uptake ratio between the two activity distributions. The theoretic error was larger for a 5:1 activity uptake ratio than for a 1:1 ratio. Task three entailed the completion of a series of phantom studies to evaluate the practical application of the developed model. Software was developed to apply the

model to image data acquired using a phantom and a commercially available gamma camera system. The activity estimates obtained had accuracy consistent with that predicted by the mathematical model. The activity estimates were also comparable to activity estimates determined from quantitative analysis of attenuation-corrected SPECT. The results from the first three tasks indicated that the modified conjugate imaging technique presented can be used to estimate activity accurately in each of two aligned activity distributions with a diameter of 3cm or less separated by a distance s.

Tasks four, five, and six involved the specific application of conjugate imaging of activity uptake in the striata of a primate using a novel dedicated small field-of-view (FOV) imaging system and $^{123}$I and $^{99m}$Tc- labeled radiopharmaceuticals. These last three tasks utilized a Monte Carlo simulation model developed to simulate conjugate imaging of activity uptake in the striata of a primate using two small FOV gamma cameras. Task four was the designing and characterization of an appropriate shielding design for the small FOV gamma cameras comprising the dedicated conjugate imaging system. Task five was the use of the simulation model to assess the accuracy of the activity estimates in each striatum. To represent healthy, early-stage Parkinson's, and late-stage Parkinson's patients, three activity uptake ratios were investigated. In addition, four radiopharmaceuticals, two attenuation coefficients, and 2 regions of interest (ROIs) were investigated. The activity estimates obtained had accuracies consistent with the theoretic error analysis. However, the theoretic error analysis did not incorporate the influence of ROI size variability and the emission spectrum and biodistribution of radiopharmaceuticals. It was apparent from the differences in accuracies of activity estimates determined using different ROI sizes and different radiopharmaceuticals that

ROI size and choice of radiopharmaceuticals influence the accuracy of the activity estimates. Although the accuracies were consistent with the trends predicted by the theoretic error analysis, the influence of ROI size and properties of the radiopharmaceuticals introduced new correlations, which warrant further investigation. Task six was the investigation of the application of scatter correction to data acquired from conjugate imaging of two aligned activity distributions. The triple energy window (TEW) scatter correction technique was applied to the data obtained from the Monte Carlo simulations. It was determined that TEW scatter correction must be applied to emission and transmission data to improve accuracies of activity estimates. Even though, the scatter correction investigation was specific to the conjugate imaging of primate striata, it is probable key aspects of the investigation extrapolate to the general application of conjugate imaging of two aligned activity distributions. The results from tasks four through six indicated the viability of the modified conjugate imaging technique as a tool to evaluate striatal activity uptake.

## 8.2 Future Work

The modified conjugate imaging technique presented in this dissertation is a viable quantitative imaging technique to evaluate activity uptake in the striata. Its accuracy is comparable to that of diagnostic quantitative emission techniques currently used in clinical settings. A novel dedicated conjugate imaging system is capable of acquiring the data required for modified conjugate imaging of striatal uptake. A next step in the development of the imaging technique and imaging system is to refine their characterization.

The Monte Carlo simulations were performed with modifications. The attenuation coefficients and camera sensitivity were determined for one pixel and applied to all pixels instead of on a pixel-by-pixel basis. Future research could include performing Monte Carlo simulations using flood data to determine the effective attenuation coefficients and camera sensitivity for each pixel. An anthropomorphic phantom could be used in the Monte Carlo simulations to account for skull effects. Furthermore, the application of alternative scatter correction techniques that are applicable to planar data should be pursued.

Another research direction would include an investigation and clarification of the origins of the errors associated with the activity estimates. Error analysis of the modified conjugate imaging technique indicated that the accuracy of the activity estimates was sensitive to error in depth measurements. This sensitivity is exacerbated when the activity uptake ratio is not one to one. However, there was still a noticeable difference in the percent errors between the large and small activity striatum in the simulated studies, where the depth of each striatum was accurately known. A thorough investigation could be conducted to determine what other possible parameters might cause this percent error difference.

# APPENDIX A

Listed below are the activity uptake estimates determined using the modified conjugate imaging technique for various ROI sizes and two attenuation coefficients. This data represent the complete set of data generated from the simulations.

Table A.1. $^{123}$I β-CIT 1:1 Activity Uptake Ratio, Primary and High-Energy Emissions

| Data Type | whole | | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | | 100 | 100 | 200 | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.15451 | 0.048653 | 6.3288 | 85.2662 | 83.5891 | 165.6842 | 171.4747 | | -14.73% | -16.41% | -17.16% | -14.26% | 1.02 | 2.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.15373 | 0.048653 | 6.2967 | 87.4493 | 91.456 | 173.5889 | 179.6554 | | -12.55% | -8.54% | -13.21% | -10.17% | 0.96 | -4.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.15283 | 0.048653 | 6.2598 | 89.4319 | 94.6157 | 175.561 | 181.6964 | | -10.57% | -5.38% | -12.22% | -9.15% | 0.95 | -5.48% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1518 | 0.048653 | 6.2178 | 90.7658 | 96.5738 | 176.3087 | 182.4701 | | -9.23% | -3.43% | -11.85% | -8.76% | 0.94 | -6.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.14649 | 0.048653 | 6.0001 | 95.1331 | 101.4049 | 175.8076 | 181.9514 | | -4.87% | 1.40% | -12.10% | -9.02% | 0.94 | -6.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.14099 | 0.048653 | 5.7749 | 99.3496 | 109.541 | 179.3776 | 185.6455 | | -0.65% | 9.54% | -10.31% | -7.18% | 0.91 | -9.30% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.15451 | 0.048653 | 6.3288 | 75.4421 | 73.6226 | 146.2603 | 149.6095 | | -24.56% | -26.38% | -26.87% | -25.20% | 1.02 | 2.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.15373 | 0.048653 | 6.2967 | 76.798 | 81.1624 | 153.2553 | 156.7646 | | -23.20% | -18.84% | -23.37% | -21.62% | 0.95 | -5.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.15283 | 0.048653 | 6.2598 | 78.4431 | 84.0752 | 155.0041 | 158.5534 | | -21.56% | -15.92% | -22.50% | -20.72% | 0.93 | -6.70% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1518 | 0.048653 | 6.2178 | 79.5545 | 85.8944 | 155.6747 | 159.2393 | | -20.45% | -14.11% | -22.16% | -20.38% | 0.93 | -7.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.14649 | 0.048653 | 6.0001 | 83.3828 | 90.3081 | 155.2638 | 158.819 | | -16.62% | -9.69% | -22.37% | -20.59% | 0.92 | -7.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.14099 | 0.048653 | 5.7749 | 86.7786 | 97.9962 | 158.4615 | 162.0895 | | -13.22% | -2.00% | -20.77% | -18.96% | 0.89 | -11.45% |

Table A.2. $^{123}$I β-CIT 1:1 Activity Uptake Ratio, Primary 159 keV Emissions

| Data Type | prmy | | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | | 100 | 100 | 200 | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13637 | 0.066137 | 5.5859 | 104.2062 | 101.7587 | 202.3129 | 209.3835 | | 4.21% | 1.76% | 1.16% | 4.69% | 1.02 | 2.41% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13568 | 0.066137 | 5.5576 | 107.3398 | 111.9397 | 212.8803 | 220.32 | | 7.34% | 11.94% | 6.44% | 10.16% | 0.96 | -4.11% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13489 | 0.066137 | 5.525 | 110.0653 | 116.7492 | 216.4444 | 224.0084 | | 10.07% | 16.75% | 8.22% | 12.00% | 0.94 | -5.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13398 | 0.066137 | 5.4879 | 112.2091 | 119.888 | 218.4146 | 226.0473 | | 12.21% | 19.89% | 9.21% | 13.02% | 0.94 | -6.41% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12929 | 0.066137 | 5.2958 | 120.4859 | 128.5718 | 222.0182 | 229.7768 | | 20.49% | 28.57% | 11.01% | 14.89% | 0.94 | -6.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12444 | 0.066137 | 5.097 | 127.5697 | 140.8909 | 229.0775 | 237.082 | | 27.57% | 40.89% | 14.54% | 18.54% | 0.91 | -9.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13637 | 0.066137 | 5.5859 | 92.2405 | 89.5869 | 178.5986 | 182.6884 | | -7.76% | -10.41% | -10.70% | -8.66% | 1.03 | 2.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13568 | 0.066137 | 5.5576 | 94.2997 | 99.3133 | 187.95 | 192.2538 | | -5.70% | -0.69% | -6.03% | -3.87% | 0.95 | -5.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13489 | 0.066137 | 5.525 | 96.5148 | 103.7759 | 191.1084 | 195.4844 | | -3.49% | 3.78% | -4.45% | -2.26% | 0.93 | -7.00% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13398 | 0.066137 | 5.4879 | 98.3026 | 106.6877 | 192.8646 | 197.2807 | | -1.70% | 6.69% | -3.57% | -1.36% | 0.92 | -7.86% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12929 | 0.066137 | 5.2958 | 105.6174 | 114.5459 | 196.1178 | 200.6084 | | 5.62% | 14.55% | -1.94% | 0.30% | 0.92 | -7.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12444 | 0.066137 | 5.097 | 111.4544 | 126.1396 | 202.4468 | 207.0819 | | 11.45% | 26.14% | 1.22% | 3.54% | 0.88 | -11.64% |

Table A.3. $^{123}$I β-CIT 2:1 Activity Uptake Ratio, Primary and High-Energy Emissions

| Data Type | whole | | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | | 100 | 50 | 150 | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.15175 | 0.048813 | 6.2155 | 85.5289 | 39.1927 | 120.6074 | 124.7845 | | -14.47% | -21.61% | -19.60% | -16.81% | 2.18 | 9.11% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.15098 | 0.048813 | 6.184 | 86.8469 | 45.5504 | 126.0203 | 130.3969 | | -13.15% | -8.90% | -15.99% | -13.07% | 1.91 | -4.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.15009 | 0.048813 | 6.1477 | 88.4166 | 48.1324 | 127.137 | 131.5553 | | -11.58% | -3.74% | -15.24% | -12.30% | 1.84 | -8.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.14908 | 0.048813 | 6.1065 | 89.8561 | 49.3254 | 127.4433 | 131.8731 | | -10.14% | -1.35% | -15.04% | -12.08% | 1.82 | -8.91% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.14386 | 0.048813 | 5.8927 | 94.348 | 52.8252 | 126.3031 | 130.6953 | | -5.65% | 5.65% | -15.80% | -12.87% | 1.79 | -10.70% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13846 | 0.048813 | 5.6715 | 98.372 | 60.532 | 129.5579 | 134.0702 | | -1.63% | 21.06% | -13.63% | -10.62% | 1.63 | -18.74% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.15175 | 0.048813 | 6.2155 | 80.1 | 30.003 | 106.4551 | 108.8708 | | -19.90% | -39.99% | -29.03% | -27.42% | 2.67 | 33.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.15098 | 0.048813 | 6.184 | 80.7552 | 36.1433 | 111.2495 | 113.7809 | | -19.24% | -27.71% | -25.83% | -24.15% | 2.23 | 11.72% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.15009 | 0.048813 | 6.1477 | 82.05 | 38.5289 | 112.2425 | 114.7983 | | -17.95% | -22.94% | -25.17% | -23.47% | 2.13 | 6.48% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.14908 | 0.048813 | 6.1065 | 83.342 | 39.5832 | 112.5226 | 115.0852 | | -16.66% | -20.83% | -24.98% | -23.28% | 2.11 | 5.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.14386 | 0.048813 | 5.8927 | 87.4238 | 42.6673 | 111.542 | 114.0835 | | -12.58% | -14.67% | -25.64% | -23.94% | 2.05 | 2.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13846 | 0.048813 | 5.6715 | 90.6714 | 49.9445 | 114.458 | 117.07 | | -9.33% | -0.11% | -23.69% | -21.95% | 1.82 | -9.23% |

Table A.4. $^{123}$I β-CIT 2:1 Activity Uptake Ratio, Primary 159 keV Emissions

| Data Type | prmy | | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | | 100 | 50 | 150 | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.1356 | 0.066243 | 5.5541 | 103.8559 | 49.309 | 148.3487 | 153.4904 | | 3.86% | -1.38% | -1.10% | 2.33% | 2.11 | 5.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13491 | 0.066243 | 5.526 | 105.7571 | 57.9126 | 155.9671 | 161.3879 | | 5.76% | 15.83% | 3.98% | 7.59% | 1.83 | -8.69% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13412 | 0.066243 | 5.4935 | 107.7927 | 62.2475 | 158.5941 | 164.1112 | | 7.79% | 24.50% | 5.73% | 9.41% | 1.73 | -13.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13322 | 0.066243 | 5.4567 | 109.8481 | 64.7632 | 159.9531 | 165.5195 | | 9.85% | 29.53% | 6.64% | 10.35% | 1.70 | -15.19% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.12856 | 0.066243 | 5.2656 | 117.0373 | 73.0175 | 162.7306 | 168.3992 | | 17.04% | 46.04% | 8.49% | 12.27% | 1.60 | -19.86% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.12373 | 0.066243 | 5.068 | 123.159 | 85.7935 | 169.6449 | 175.5628 | | 23.16% | 71.59% | 13.10% | 17.04% | 1.44 | -28.22% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.1356 | 0.066243 | 5.5541 | 97.0942 | 38.1207 | 130.9442 | 133.9177 | | -2.91% | -23.76% | -12.70% | -10.72% | 2.55 | 27.35% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13491 | 0.066243 | 5.526 | 98.0969 | 46.4178 | 137.6906 | 140.8261 | | -1.90% | -7.16% | -8.21% | -6.12% | 2.11 | 5.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13412 | 0.066243 | 5.4935 | 99.6781 | 50.4827 | 140.0217 | 143.2132 | | -0.32% | 0.97% | -6.65% | -4.52% | 1.97 | -1.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13322 | 0.066243 | 5.4567 | 101.4409 | 52.7893 | 141.2386 | 144.459 | | 1.44% | 5.58% | -5.84% | -3.69% | 1.92 | -3.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.12856 | 0.066243 | 5.2656 | 107.719 | 60.332 | 143.7582 | 147.0393 | | 7.72% | 20.66% | -4.16% | -1.97% | 1.79 | -10.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.12373 | 0.066243 | 5.068 | 112.5486 | 72.4754 | 149.957 | 153.3846 | | 12.55% | 44.95% | -0.03% | 2.26% | 1.55 | -22.35% |

Table A.5. $^{123}$I β-CIT 5:1 Activity Uptake Ratio, Primary and High-Energy Emissions

| Data Type | whole | | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | | 100 | 20 | 120 | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.15007 | 0.048936 | 6.1469 | 85.6892 | 12.5564 | 92.5433 | 95.6605 | | -14.31% | -37.22% | -22.88% | -20.28% | 6.82 | 36.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.14931 | 0.048936 | 6.1157 | 86.491 | 18.0099 | 96.4345 | 99.7109 | | -13.51% | -9.95% | -19.64% | -16.91% | 4.80 | -3.95% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.14843 | 0.048936 | 6.0799 | 87.8202 | 20.2495 | 97.0538 | 100.3598 | | -12.18% | 1.25% | -19.12% | -16.37% | 4.34 | -13.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.14744 | 0.048936 | 6.0391 | 89.3109 | 21.0184 | 97.0659 | 100.3746 | | -10.69% | 5.09% | -19.11% | -16.35% | 4.25 | -15.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.14228 | 0.048936 | 5.8276 | 93.8563 | 23.7841 | 95.3168 | 98.5735 | | -6.14% | 18.92% | -20.57% | -17.86% | 3.95 | -21.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13694 | 0.048936 | 5.6089 | 97.7888 | 31.1779 | 98.3914 | 101.7735 | | -2.21% | 55.89% | -18.01% | -15.19% | 3.14 | -37.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.15007 | 0.048936 | 6.1469 | 82.8973 | 3.8328 | 81.6578 | 83.4597 | | -17.10% | -80.84% | -31.95% | -30.45% | 21.63 | 332.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.14931 | 0.048936 | 6.1157 | 83.1346 | 9.1343 | 85.1099 | 87.0043 | | -16.87% | -54.33% | -29.08% | -27.50% | 9.10 | 82.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.14843 | 0.048936 | 6.0799 | 84.226 | 11.207 | 85.664 | 87.5757 | | -15.77% | -43.97% | -28.61% | -27.02% | 7.52 | 50.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.14744 | 0.048936 | 6.0391 | 85.6109 | 11.838 | 85.6839 | 87.5974 | | -14.39% | -40.81% | -28.60% | -27.00% | 7.23 | 44.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.14228 | 0.048936 | 5.8276 | 89.8171 | 14.1908 | 84.1665 | 86.0505 | | -10.18% | -29.05% | -29.86% | -28.29% | 6.33 | 26.58% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13694 | 0.048936 | 5.6089 | 93.0064 | 21.1626 | 86.924 | 88.8815 | | -6.99% | 5.81% | -27.56% | -25.93% | 4.39 | -12.10% |

Table A.6. $^{123}$I β-CIT 5:1 Activity Uptake Ratio, Primary 159 keV Emissions

| Data Type | prmy | | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | | 100 | 20 | 120 | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13506 | 0.066405 | 5.5319 | 103.6582 | 17.8496 | 114.8941 | 118.7787 | | 3.66% | -10.75% | -4.25% | -1.02% | 5.81 | 16.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13437 | 0.066405 | 5.5039 | 104.8183 | 25.5156 | 120.7397 | 124.8582 | | 4.82% | 27.58% | 0.62% | 4.05% | 4.11 | -17.84% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13358 | 0.066405 | 5.4716 | 106.441 | 29.5745 | 122.7208 | 126.9212 | | 6.44% | 47.87% | 2.27% | 5.77% | 3.60 | -28.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13269 | 0.066405 | 5.4349 | 108.4209 | 31.7219 | 123.7374 | 127.9789 | | 8.42% | 58.61% | 3.11% | 6.65% | 3.42 | -31.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.12804 | 0.066405 | 5.2446 | 115.131 | 39.7152 | 126.0584 | 130.399 | | 15.13% | 98.58% | 5.05% | 8.67% | 2.90 | -42.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.12324 | 0.066405 | 5.0477 | 120.7654 | 52.6776 | 132.8607 | 137.4614 | | 20.77% | 163.39% | 10.72% | 14.55% | 2.29 | -54.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13506 | 0.066405 | 5.5319 | 100.0177 | 7.2503 | 101.3861 | 103.6318 | | 0.02% | -63.75% | -15.51% | -13.64% | 13.79 | 175.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13437 | 0.066405 | 5.5039 | 100.3849 | 14.698 | 106.5695 | 108.951 | | 0.38% | -26.51% | -11.19% | -9.21% | 6.83 | 36.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13358 | 0.066405 | 5.4716 | 101.5857 | 18.5328 | 108.331 | 110.7602 | | 1.59% | -7.34% | -9.72% | -7.70% | 5.48 | 9.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.13269 | 0.066405 | 5.4349 | 103.311 | 20.4838 | 109.2459 | 111.6993 | | 3.31% | 2.42% | -8.96% | -6.92% | 5.04 | 0.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.12804 | 0.066405 | 5.2446 | 109.1381 | 27.8163 | 111.3622 | 113.8745 | | 9.14% | 39.08% | -7.20% | -5.10% | 3.92 | -21.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | %Err Ratio |
| 0.12324 | 0.066405 | 5.0477 | 113.4617 | 40.193 | 117.463 | 120.128 | | 13.46% | 100.97% | -2.11% | 0.11% | 2.82 | -43.54% |

Table A.7. $^{123}$I FP-CIT 1:1 Activity Uptake Ratio, Primary and High-Energy Emissions

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 40 | 40 | 80 | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.036241 | 0.010658 | 1.4844 | 34.6736 | 34.3725 | 68.5012 | 70.8953 | | -13.32% | -14.07% | -14.37% | -11.38% | 1.01 | 0.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.036058 | 0.010658 | 1.4769 | 36.151 | 36.928 | 72.0297 | 74.547 | | -9.62% | -7.68% | -9.96% | -6.82% | 0.98 | -2.10% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.035846 | 0.010658 | 1.4683 | 36.9593 | 38.0219 | 73.1168 | 75.6721 | | -7.60% | -4.95% | -8.60% | -5.41% | 0.97 | -2.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.035606 | 0.010658 | 1.4584 | 37.3938 | 38.7755 | 73.6726 | 76.2474 | | -6.52% | -3.06% | -7.91% | -4.69% | 0.96 | -3.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034359 | 0.010658 | 1.4073 | 38.7877 | 40.4335 | 74.2187 | 76.8124 | | -3.03% | 1.08% | -7.23% | -3.98% | 0.96 | -4.07% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.033069 | 0.010658 | 1.3545 | 39.9703 | 42.5285 | 75.3107 | 77.9426 | | -0.07% | 6.32% | -5.86% | -2.57% | 0.94 | -6.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.036241 | 0.010658 | 1.4844 | 30.6402 | 30.3141 | 60.473 | 61.8578 | | -23.40% | -24.21% | -24.41% | -22.68% | 1.01 | 1.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.036058 | 0.010658 | 1.4769 | 31.8373 | 32.686 | 63.595 | 65.0513 | | -20.41% | -18.29% | -20.51% | -18.69% | 0.97 | -2.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.035846 | 0.010658 | 1.4683 | 32.527 | 33.6817 | 64.5578 | 66.0361 | | -18.68% | -15.80% | -19.30% | -17.45% | 0.97 | -3.43% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.035606 | 0.010658 | 1.4584 | 32.8775 | 34.3869 | 65.0519 | 66.5415 | | -17.81% | -14.03% | -18.69% | -16.82% | 0.96 | -4.39% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034359 | 0.010658 | 1.4073 | 34.0893 | 35.9039 | 65.5447 | 67.0456 | | -14.78% | -10.24% | -18.07% | -16.19% | 0.95 | -5.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.033069 | 0.010658 | 1.3545 | 35.0605 | 37.8735 | 66.523 | 68.0462 | | -12.35% | -5.32% | -16.85% | -14.94% | 0.93 | -7.43% |

Table A.8. $^{123}$I FP -CIT 1:1 Activity Uptake Ratio, Primary 159 keV Emissions

| Data Type | prmy | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 40 | 40 | 80 | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.030445 | 0.014555 | 1.247 | 41.9472 | 41.4942 | 82.8219 | 85.7164 | | 4.87% | 3.74% | 3.53% | 7.15% | 1.01 | 1.09% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.030291 | 0.014555 | 1.2407 | 43.8116 | 44.7141 | 87.2975 | 90.3484 | | 9.53% | 11.79% | 9.12% | 12.94% | 0.98 | -2.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.030113 | 0.014555 | 1.2334 | 44.8447 | 46.2407 | 88.8816 | 91.9879 | | 12.11% | 15.60% | 11.10% | 14.98% | 0.97 | -3.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.029911 | 0.014555 | 1.2252 | 45.4758 | 47.3035 | 89.7924 | 92.9305 | | 13.69% | 18.26% | 12.24% | 16.16% | 0.96 | -3.86% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028864 | 0.014555 | 1.1823 | 47.7272 | 49.9105 | 91.3593 | 94.5521 | | 19.32% | 24.78% | 14.20% | 18.19% | 0.96 | -4.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02778 | 0.014555 | 1.1379 | 49.6075 | 52.9052 | 93.2049 | 96.462 | | 24.02% | 32.26% | 16.51% | 20.58% | 0.94 | -6.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.030445 | 0.014555 | 1.247 | 37.0766 | 36.5866 | 73.1158 | 74.7902 | | -7.31% | -8.53% | -8.61% | -6.51% | 1.01 | 1.34% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.030291 | 0.014555 | 1.2407 | 38.5881 | 39.5746 | 77.0763 | 78.8413 | | -3.53% | -1.06% | -3.65% | -1.45% | 0.98 | -2.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.030113 | 0.014555 | 1.2334 | 39.4571 | 40.9735 | 78.4794 | 80.2765 | | -1.36% | 2.43% | -1.90% | 0.35% | 0.96 | -3.70% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.029911 | 0.014555 | 1.2252 | 39.9698 | 41.966 | 79.2887 | 81.1044 | | -0.08% | 4.92% | -0.89% | 1.38% | 0.95 | -4.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028864 | 0.014555 | 1.1823 | 41.9364 | 44.3413 | 80.6928 | 82.5406 | | 4.84% | 10.85% | 0.87% | 3.18% | 0.95 | -5.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02778 | 0.014555 | 1.1379 | 43.5124 | 47.1444 | 82.3475 | 84.233 | | 8.78% | 17.86% | 2.93% | 5.29% | 0.92 | -7.70% |

Table A.9. $^{123}$I FP -CIT 2:1 Activity Uptake Ratio Primary and High-Energy Emissions

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 40 | 20 | 60 | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.035157 | 0.010689 | 1.44 | 34.7742 | 16.6124 | 50.6044 | 52.3585 | | -13.06% | -16.94% | -15.66% | -12.74% | 2.09 | 4.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034979 | 0.010689 | 1.4328 | 35.9077 | 18.5607 | 53.1984 | 55.0454 | | -10.23% | -7.20% | -11.34% | -8.26% | 1.93 | -3.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034774 | 0.010689 | 1.4243 | 36.5502 | 19.4209 | 53.9498 | 55.8238 | | -8.62% | -2.90% | -10.08% | -6.96% | 1.88 | -5.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034541 | 0.010689 | 1.4148 | 37.0245 | 19.8725 | 54.2613 | 56.1466 | | -7.44% | -0.64% | -9.56% | -6.42% | 1.86 | -6.84% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.033332 | 0.010689 | 1.3653 | 38.4472 | 20.9854 | 54.4487 | 56.3412 | | -3.88% | 4.93% | -9.25% | -6.10% | 1.83 | -8.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.03208 | 0.010689 | 1.314 | 39.5894 | 22.8257 | 55.3782 | 57.3048 | | -1.03% | 14.13% | -7.70% | -4.49% | 1.73 | -13.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.035157 | 0.010689 | 1.44 | 32.4993 | 12.8649 | 44.669 | 45.6835 | | -18.75% | -35.68% | -25.55% | -23.86% | 2.53 | 26.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034979 | 0.010689 | 1.4328 | 33.4179 | 14.6736 | 46.965 | 48.0333 | | -16.46% | -26.63% | -21.73% | -19.94% | 2.28 | 13.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034774 | 0.010689 | 1.4243 | 33.9672 | 15.4559 | 47.6308 | 48.7148 | | -15.08% | -22.72% | -20.62% | -18.81% | 2.20 | 9.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034541 | 0.010689 | 1.4148 | 34.387 | 15.8594 | 47.9086 | 48.9992 | | -14.03% | -20.70% | -20.15% | -18.33% | 2.17 | 8.41% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.033332 | 0.010689 | 1.3653 | 35.6813 | 16.8343 | 48.0831 | 49.1781 | | -10.80% | -15.83% | -19.86% | -18.04% | 2.12 | 5.98% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.03208 | 0.010689 | 1.314 | 36.6376 | 18.5542 | 48.9164 | 50.0315 | | -8.41% | -7.23% | -18.47% | -16.61% | 1.97 | -1.27% |

Table A.10. $^{123}$I FP -CIT 2:1 Activity Uptake Ratio, Primary 159 keV Emissions

| Data Type | prmy | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 40 | 20 | 60 | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.030164 | 0.014556 | 1.2355 | 41.8015 | 20.5113 | 61.4169 | 63.547 | | 4.50% | 2.56% | 2.36% | 5.91% | 2.04 | 1.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.030011 | 0.014556 | 1.2292 | 43.1736 | 23.0972 | 64.7592 | 67.009 | | 7.93% | 15.49% | 7.93% | 11.68% | 1.87 | -6.54% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.029835 | 0.014556 | 1.222 | 43.9278 | 24.4321 | 65.9453 | 68.2379 | | 9.82% | 22.16% | 9.91% | 13.73% | 1.80 | -10.10% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.029635 | 0.014556 | 1.2138 | 44.5099 | 25.243 | 66.5775 | 68.8929 | | 11.27% | 26.22% | 10.96% | 14.82% | 1.76 | -11.84% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028597 | 0.014556 | 1.1713 | 46.4115 | 27.6227 | 67.7339 | 70.0916 | | 16.03% | 38.11% | 12.89% | 16.82% | 1.68 | -15.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027524 | 0.014556 | 1.1274 | 47.8528 | 30.741 | 69.4314 | 71.851 | | 19.63% | 53.71% | 15.72% | 19.75% | 1.56 | -22.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.030164 | 0.014556 | 1.2355 | 39.0131 | 15.9973 | 54.2144 | 55.4463 | | -2.47% | -20.01% | -9.64% | -7.59% | 2.44 | 21.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.030011 | 0.014556 | 1.2292 | 40.1024 | 18.4109 | 57.1728 | 58.4742 | | 0.26% | -7.95% | -4.71% | -2.54% | 2.18 | 8.91% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.029835 | 0.014556 | 1.222 | 40.7151 | 19.6492 | 58.2239 | 59.5501 | | 1.79% | -1.75% | -2.96% | -0.75% | 2.07 | 3.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.029635 | 0.014556 | 1.2138 | 41.2046 | 20.3982 | 58.7865 | 60.1261 | | 3.01% | 1.99% | -2.02% | 0.21% | 2.02 | 1.00% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028597 | 0.014556 | 1.1713 | 42.8466 | 22.5842 | 59.8261 | 61.1905 | | 7.12% | 12.92% | -0.29% | 1.98% | 1.90 | -5.14% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027524 | 0.014556 | 1.1274 | 43.9728 | 25.5542 | 61.349 | 62.7497 | | 9.93% | 27.77% | 2.25% | 4.58% | 1.72 | -13.96% |

Table A.11. $^{123}$I FP -CIT 5:1 Activity Uptake Ratio, Primary and High-Energy Emissions

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 40 | 8 | 48 | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034499 | 0.010723 | 1.4131 | 34.8357 | 5.968 | 39.4517 | 40.7854 | | -12.91% | -25.53% | -17.81% | -15.03% | 5.85 | 16.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034324 | 0.010723 | 1.4059 | 35.7633 | 7.5425 | 41.4438 | 42.8522 | | -10.59% | -5.72% | -13.66% | -10.72% | 4.74 | -5.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034122 | 0.010723 | 1.3977 | 36.3061 | 8.2636 | 42.0021 | 43.4322 | | -9.23% | 3.30% | -12.50% | -9.52% | 4.39 | -12.13% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.033894 | 0.010723 | 1.3883 | 36.8044 | 8.5358 | 42.16 | 43.5964 | | -7.99% | 6.70% | -12.17% | -9.17% | 4.31 | -13.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.032707 | 0.010723 | 1.3397 | 38.2464 | 9.3412 | 42.1035 | 43.5403 | | -4.38% | 16.77% | -12.28% | -9.29% | 4.09 | -18.11% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.031479 | 0.010723 | 1.2894 | 39.3774 | 11.0428 | 42.9503 | 44.4215 | | -1.56% | 38.04% | -10.52% | -7.46% | 3.57 | -28.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034499 | 0.010723 | 1.4131 | 33.6158 | 2.3968 | 34.8143 | 35.5853 | | -15.96% | -70.04% | -27.47% | -25.86% | 14.03 | 180.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034324 | 0.010723 | 1.4059 | 34.3677 | 3.8681 | 36.5785 | 37.3928 | | -14.08% | -51.65% | -23.79% | -22.10% | 8.88 | 77.70% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034122 | 0.010723 | 1.3977 | 34.8323 | 4.5234 | 37.0738 | 37.9009 | | -12.92% | -43.46% | -22.76% | -21.04% | 7.70 | 54.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.033894 | 0.010723 | 1.3883 | 35.2938 | 4.7477 | 37.2159 | 38.0465 | | -11.77% | -40.65% | -22.47% | -20.74% | 7.43 | 48.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.032707 | 0.010723 | 1.3397 | 36.6372 | 5.4167 | 37.1743 | 38.0054 | | -8.41% | -32.29% | -22.55% | -20.82% | 6.76 | 35.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.031479 | 0.010723 | 1.2894 | 37.5962 | 6.9995 | 37.9341 | 38.7854 | | -6.01% | -12.51% | -20.97% | -19.20% | 5.37 | 7.43% |

Table A.12. $^{123}$I FP -CIT 5:1 Activity Uptake Ratio, Primary 159 keV Emissions

| Data Type | prmy | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 40 | 8 | 48 | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02997 | 0.014589 | 1.2276 | 41.7178 | 7.926 | 48.1021 | 49.7323 | | 4.29% | -0.92% | 0.21% | 3.61% | 5.26 | 5.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.029819 | 0.014589 | 1.2214 | 42.7956 | 10.133 | 50.7317 | 52.4609 | | 6.99% | 26.66% | 5.69% | 9.29% | 4.22 | -15.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.029644 | 0.014589 | 1.2142 | 43.3839 | 11.3544 | 51.6766 | 53.4426 | | 8.46% | 41.93% | 7.66% | 11.34% | 3.82 | -23.58% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.029445 | 0.014589 | 1.2061 | 43.9408 | 12.0155 | 52.1512 | 53.9356 | | 9.85% | 50.19% | 8.65% | 12.37% | 3.66 | -26.86% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028414 | 0.014589 | 1.1638 | 45.6491 | 14.2687 | 53.1233 | 54.9477 | | 14.12% | 78.36% | 10.67% | 14.47% | 3.20 | -36.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027347 | 0.014589 | 1.1201 | 46.8396 | 17.461 | 54.7213 | 56.6092 | | 17.10% | 118.26% | 14.00% | 17.94% | 2.68 | -46.35% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02997 | 0.014589 | 1.2276 | 40.1782 | 3.6477 | 42.4497 | 43.3923 | | 0.45% | -54.40% | -11.56% | -9.60% | 11.01 | 120.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.029819 | 0.014589 | 1.2214 | 41.0153 | 5.7179 | 44.7787 | 45.7786 | | 2.54% | -28.53% | -6.71% | -4.63% | 7.17 | 43.46% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.029644 | 0.014589 | 1.2142 | 41.4755 | 6.8611 | 45.6169 | 46.6382 | | 3.69% | -14.24% | -4.96% | -2.84% | 6.05 | 20.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.029445 | 0.014589 | 1.2061 | 41.955 | 7.4651 | 46.0404 | 47.0725 | | 4.89% | -6.69% | -4.08% | -1.93% | 5.62 | 62.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028414 | 0.014589 | 1.1638 | 43.4175 | 9.5456 | 46.9173 | 47.9729 | | 8.54% | 19.32% | -2.26% | -0.06% | 4.55 | -9.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027347 | 0.014589 | 1.1201 | 44.2862 | 12.6144 | 48.3524 | 49.4453 | | 10.72% | 57.68% | 0.73% | 3.01% | 3.51 | -29.78% |

Table A.13. $^{123}$I IBZM 1:1 Activity Uptake Ratio, Primary and High-Energy Emissions

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 84 | 84 | 168 | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.038468 | 0.010021 | 1.5757 | 73.7714 | 73.6867 | 146.803 | 151.9336 | | -12.18% | -12.28% | -12.62% | -9.56% | 1.00 | 0.11% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.038274 | 0.010021 | 1.5677 | 77.7528 | 78.2086 | 154.8244 | 160.2354 | | -7.44% | -6.89% | -7.84% | -4.62% | 0.99 | -0.58% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.038049 | 0.010021 | 1.5585 | 79.4953 | 80.2366 | 157.5951 | 163.1028 | | -5.36% | -4.48% | -6.19% | -2.92% | 0.99 | -0.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.037794 | 0.010021 | 1.548 | 80.2753 | 81.7702 | 159.1376 | 164.6992 | | -4.43% | -2.65% | -5.28% | -1.96% | 0.98 | -1.83% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.036471 | 0.010021 | 1.4938 | 82.6633 | 84.891 | 161.6658 | 167.3158 | | -1.59% | 1.06% | -3.77% | -0.41% | 0.97 | -2.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.035102 | 0.010021 | 1.4378 | 84.5832 | 87.4921 | 163.594 | 169.3113 | | 0.69% | 4.16% | -2.62% | 0.78% | 0.97 | -3.32% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.038468 | 0.010021 | 1.5757 | 65.1337 | 65.0446 | 129.5998 | 132.5676 | | -22.46% | -22.57% | -22.86% | -21.09% | 1.00 | 0.14% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.038274 | 0.010021 | 1.5677 | 68.5995 | 69.103 | 136.6977 | 139.828 | | -18.33% | -17.73% | -18.63% | -16.77% | 0.99 | -0.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.038049 | 0.010021 | 1.5585 | 70.1193 | 70.9238 | 139.1516 | 142.3381 | | -16.52% | -15.57% | -17.17% | -15.27% | 0.99 | -1.13% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.037794 | 0.010021 | 1.548 | 70.7311 | 72.3651 | 140.52 | 143.7378 | | -15.80% | -13.85% | -16.36% | -14.44% | 0.98 | -2.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.036471 | 0.010021 | 1.4938 | 72.7821 | 75.2304 | 142.7752 | 146.0446 | | -13.35% | -10.44% | -15.01% | -13.07% | 0.97 | -3.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.035102 | 0.010021 | 1.4378 | 74.4365 | 77.6295 | 144.5003 | 147.8092 | | -11.39% | -7.58% | -13.99% | -12.02% | 0.96 | -4.11% |

Table A.14. $^{123}$I IBZM 1:1 Activity Uptake Ratio, Primary 159 keV Emissions

| Data Type | prmy | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 84 | 84 | 168 | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02917 | 0.013699 | 1.1948 | 88.706 | 88.5104 | 176.4347 | 182.6009 | | 5.60% | 5.37% | 5.02% | 8.69% | 1.00 | 0.22% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.029023 | 0.013699 | 1.1888 | 93.5122 | 94.0716 | 186.2798 | 192.79 | | 11.32% | 11.99% | 10.88% | 14.76% | 0.99 | -0.59% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028852 | 0.013699 | 1.1818 | 95.6119 | 96.7175 | 189.9188 | 196.5562 | | 13.82% | 15.14% | 13.05% | 17.00% | 0.99 | -1.14% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028659 | 0.013699 | 1.1739 | 96.6221 | 98.6828 | 191.9792 | 198.6886 | | 15.03% | 17.48% | 14.27% | 18.27% | 0.98 | -2.09% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027655 | 0.013699 | 1.1328 | 99.9662 | 102.8303 | 195.6668 | 202.505 | | 19.01% | 22.42% | 16.47% | 20.54% | 0.97 | -2.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026617 | 0.013699 | 1.0902 | 102.5003 | 106.3384 | 198.3641 | 205.2965 | | 22.02% | 26.59% | 18.07% | 22.20% | 0.96 | -3.61% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02917 | 0.013699 | 1.1948 | 78.3288 | 78.121 | 155.7595 | 159.3263 | | -6.75% | -7.00% | -7.29% | -5.16% | 1.00 | 0.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.029023 | 0.013699 | 1.1888 | 82.5032 | 83.1205 | 164.4715 | 168.2378 | | -1.78% | -1.05% | -2.10% | 0.14% | 0.99 | -0.74% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028852 | 0.013699 | 1.1818 | 84.3149 | 85.5136 | 167.695 | 171.5351 | | 0.37% | 1.80% | -0.18% | 2.10% | 0.99 | -1.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028659 | 0.013699 | 1.1739 | 85.11 | 87.3595 | 169.5229 | 173.4048 | | 1.32% | 4.00% | 0.91% | 3.22% | 0.97 | -2.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027655 | 0.013699 | 1.1328 | 88.0064 | 91.1511 | 172.816 | 176.7733 | | 4.77% | 8.51% | 2.87% | 5.22% | 0.97 | -3.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026617 | 0.013699 | 1.0902 | 90.1826 | 94.3998 | 175.2338 | 179.2464 | | 7.36% | 12.38% | 4.31% | 6.69% | 0.96 | -4.47% |

Table A.15. $^{123}$I IBZM 2:1 Activity Uptake Ratio, Primary and High-Energy Emissions

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 84 | 42 | 126 | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.036254 | 0.009956 | 1.4849 | 73.9724 | 36.2906 | 109.2866 | 113.077 | | -11.94% | -13.59% | -13.26% | -10.26% | 2.04 | 1.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.03607 | 0.009956 | 1.4774 | 77.2293 | 39.5292 | 115.2432 | 119.2436 | | -8.06% | -5.88% | -8.54% | -5.36% | 1.95 | -2.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.035858 | 0.009956 | 1.4688 | 78.6175 | 41.0638 | 117.2906 | 121.3635 | | -6.41% | -2.23% | -6.91% | -3.68% | 1.91 | -4.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.035618 | 0.009956 | 1.4589 | 79.4786 | 41.9566 | 118.3479 | 122.4585 | | -5.38% | -0.10% | -6.07% | -2.81% | 1.89 | -5.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034371 | 0.009956 | 1.4078 | 81.9196 | 43.8974 | 120.0319 | 124.2022 | | -2.48% | 4.52% | -4.74% | -1.43% | 1.87 | -6.69% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.033081 | 0.009956 | 1.355 | 83.7275 | 45.9473 | 121.5307 | 125.755 | | -0.32% | 9.40% | -3.55% | -0.19% | 1.82 | -8.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.036254 | 0.009956 | 1.4849 | 69.0376 | 28.304 | 96.4714 | 98.6636 | | -17.81% | -32.61% | -23.44% | -21.70% | 2.44 | 21.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.03607 | 0.009956 | 1.4774 | 71.9165 | 31.1725 | 101.7425 | 104.0565 | | -14.39% | -25.78% | -19.25% | -17.42% | 2.31 | 15.35% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.035858 | 0.009956 | 1.4688 | 73.1356 | 32.5428 | 103.5559 | 105.912 | | -12.93% | -22.52% | -17.81% | -15.94% | 2.25 | 12.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.035618 | 0.009956 | 1.4589 | 73.891 | 33.3444 | 104.4943 | 106.8722 | | -12.03% | -20.61% | -17.07% | -15.18% | 2.22 | 10.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034371 | 0.009956 | 1.4078 | 76.1114 | 35.0361 | 105.999 | 108.412 | | -9.39% | -16.58% | -15.87% | -13.96% | 2.17 | 8.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.033081 | 0.009956 | 1.355 | 77.7089 | 36.8988 | 107.3413 | 109.7859 | | -7.49% | -12.15% | -14.81% | -12.87% | 2.11 | 5.30% |

Table A.16. $^{123}$I IBZM 2:1 Activity Uptake Ratio, Primary 159 keV Emissions

| Data Type | prmy | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 84 | 42 | 126 | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02865 | 0.013585 | 1.1735 | 88.3875 | 44.3293 | 131.576 | 136.1414 | | 5.22% | 5.55% | 4.43% | 8.05% | 1.99 | -0.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028505 | 0.013585 | 1.1676 | 92.1562 | 48.551 | 138.9253 | 143.7503 | | 9.71% | 15.60% | 10.26% | 14.09% | 1.90 | -5.09% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028338 | 0.013585 | 1.1607 | 93.6638 | 50.7911 | 141.6452 | 146.5672 | | 11.50% | 20.93% | 12.42% | 16.32% | 1.84 | -7.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028148 | 0.013585 | 1.1529 | 94.5687 | 52.2221 | 143.1627 | 148.1392 | | 12.58% | 24.34% | 13.62% | 17.57% | 1.81 | -9.46% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027162 | 0.013585 | 1.1126 | 97.1623 | 55.8903 | 146.0272 | 151.107 | | 15.67% | 33.07% | 15.89% | 19.93% | 1.74 | -13.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026143 | 0.013585 | 1.0708 | 98.8151 | 59.6014 | 148.2597 | 153.4213 | | 17.64% | 41.91% | 17.67% | 21.76% | 1.66 | -17.10% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02865 | 0.013585 | 1.1735 | 82.3946 | 34.7698 | 116.148 | 118.7885 | | -1.91% | -17.21% | -7.82% | -5.72% | 2.37 | 18.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028505 | 0.013585 | 1.1676 | 85.6792 | 38.5557 | 122.6523 | 125.4434 | | 2.00% | -8.20% | -2.66% | -0.44% | 2.22 | 11.11% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028338 | 0.013585 | 1.1607 | 86.9468 | 40.6085 | 125.062 | 127.9094 | | 3.51% | -3.31% | -0.74% | 1.52% | 2.14 | 7.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028148 | 0.013585 | 1.1529 | 87.6906 | 41.9386 | 126.409 | 129.288 | | 4.39% | -0.15% | 0.32% | 2.61% | 2.09 | 4.55% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027162 | 0.013585 | 1.1126 | 89.889 | 45.332 | 128.9691 | 131.9086 | | 7.01% | 7.93% | 2.36% | 4.69% | 1.98 | -0.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026143 | 0.013585 | 1.0708 | 91.1651 | 48.8732 | 130.9719 | 133.9595 | | 8.53% | 16.36% | 3.95% | 6.32% | 1.87 | -6.73% |

Table A.17. $^{123}$I IBZM 5:1 Activity Uptake Ratio Primary and High-Energy Emissions

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 84 | 16.8 | 100.8 | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0349 | 0.009972 | 1.4295 | 74.0972 | 13.8571 | 86.006 | 88.9199 | | -11.79% | -17.52% | -14.68% | -11.79% | 5.35 | 6.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034723 | 0.009972 | 1.4222 | 76.9210 | 16.3267 | 90.7325 | 93.8164 | | -8.43% | -2.82% | -9.99% | -6.93% | 4.71 | -5.77% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034519 | 0.009972 | 1.4139 | 78.0987 | 17.5662 | 92.3549 | 95.4986 | | -7.03% | 4.56% | -8.38% | -5.26% | 4.45 | -11.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034288 | 0.009972 | 1.4044 | 79.0095 | 18.0764 | 93.0617 | 96.231 | | -5.94% | 7.60% | -7.68% | -4.53% | 4.37 | -12.58% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.033087 | 0.009972 | 1.3552 | 81.4713 | 19.3347 | 94.2651 | 97.4788 | | -3.01% | 15.09% | -6.48% | -3.29% | 4.21 | -15.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.031845 | 0.009972 | 1.3044 | 83.1912 | 21.0889 | 95.5084 | 98.7704 | | -0.96% | 25.53% | -5.25% | -2.01% | 3.94 | -21.10% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0349 | 0.009972 | 1.4295 | 71.3836 | 6.2633 | 75.901 | 77.5856 | | -15.02% | -62.72% | -24.70% | -23.03% | 11.40 | 127.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034723 | 0.009972 | 1.4222 | 73.9119 | 8.4187 | 80.0844 | 81.8676 | | -12.01% | -49.89% | -20.55% | -18.78% | 8.78 | 75.59% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034519 | 0.009972 | 1.4139 | 74.9524 | 9.5194 | 81.5219 | 83.3399 | | -10.77% | -43.34% | -19.13% | -17.32% | 7.87 | 57.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.034288 | 0.009972 | 1.4044 | 75.7949 | 9.939 | 82.1498 | 83.9827 | | -9.77% | -40.84% | -18.50% | -16.68% | 7.63 | 52.52% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.033087 | 0.009972 | 1.3552 | 78.1034 | 10.9534 | 83.2276 | 85.0865 | | -7.02% | -34.80% | -17.43% | -15.59% | 7.13 | 42.61% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.031845 | 0.009972 | 1.3044 | 79.6431 | 12.5305 | 84.3424 | 86.2296 | | -5.19% | -25.41% | -16.33% | -14.45% | 6.36 | 27.12% |

Table A.18. $^{123}$I IBZM 5:1 Activity Uptake Ratio, Primary 159 keV Emissions

| Data Type | prmy | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 84 | 16.8 | 100.8 | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026295 | 0.013578 | 1.1589 | 88.2037 | 17.8278 | 103.8001 | 107.3236 | | 5.00% | 6.12% | 2.98% | 6.47% | 4.95 | -1.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028151 | 0.013578 | 1.1531 | 91.3529 | 21.2474 | 109.7024 | 113.4398 | | 8.75% | 26.47% | 8.83% | 12.54% | 4.30 | -14.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027986 | 0.013578 | 1.1463 | 92.5082 | 23.2462 | 111.9157 | 115.736 | | 10.13% | 38.37% | 11.03% | 14.82% | 3.98 | -20.41% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027798 | 0.013578 | 1.1386 | 93.3519 | 24.3592 | 113.0501 | 116.9132 | | 11.13% | 45.00% | 12.15% | 15.99% | 3.83 | -23.35% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026825 | 0.013578 | 1.0988 | 95.4726 | 27.7555 | 115.4039 | 119.3592 | | 13.66% | 65.21% | 14.49% | 18.41% | 3.44 | -31.20% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025818 | 0.013578 | 1.0575 | 96.5843 | 31.6064 | 117.3849 | 121.4209 | | 14.98% | 88.13% | 16.45% | 20.46% | 3.06 | -38.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028295 | 0.013578 | 1.1589 | 84.8406 | 8.7655 | 91.6069 | 93.644 | | 1.00% | -47.82% | -9.12% | -7.10% | 9.68 | 93.58% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028151 | 0.013578 | 1.1531 | 87.5939 | 11.8246 | 96.8318 | 98.993 | | 4.28% | -29.62% | -3.94% | -1.79% | 7.41 | 48.16% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027986 | 0.013578 | 1.1463 | 88.5376 | 13.6751 | 98.7938 | 101.0032 | | 5.40% | -18.60% | -1.99% | 0.20% | 6.47 | 29.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027798 | 0.013578 | 1.1386 | 89.2527 | 14.6981 | 99.8017 | 102.036 | | 6.25% | -12.51% | -0.99% | 1.23% | 6.07 | 21.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026825 | 0.013578 | 1.0988 | 91.0088 | 17.8702 | 101.909 | 104.1973 | | 8.34% | 6.37% | 1.10% | 3.37% | 5.09 | 1.86% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025818 | 0.013578 | 1.0575 | 91.7317 | 21.6051 | 103.6889 | 106.0247 | | 9.20% | 28.60% | 2.87% | 5.18% | 4.25 | -15.08% |

Table A.19. $^{99m}$Tc TRODAT 1:1 Activity Uptake Ratio

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 126.4 | 126.4 | 252.8 | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0092817 | 0.005544 | 0.38018 | 134.2712 | 134.4403 | 267.5392 | 277.4698 | | 6.23% | 6.36% | 5.83% | 9.76% | 0.9987 | -0.13% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0092347 | 0.005544 | 0.37825 | 142.7976 | 140.5125 | 281.7836 | 292.2429 | | 12.97% | 11.16% | 11.47% | 15.60% | 1.0163 | 1.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0091805 | 0.005544 | 0.37603 | 144.9782 | 144.4505 | 287.2131 | 297.8739 | | 14.70% | 14.28% | 13.61% | 17.83% | 1.0037 | 0.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0091189 | 0.005544 | 0.37351 | 146.3315 | 146.8877 | 290.4317 | 301.212 | | 15.77% | 16.21% | 14.89% | 19.15% | 0.9962 | -0.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0087996 | 0.005544 | 0.36043 | 150.3009 | 151.2339 | 296.3029 | 307.3011 | | 18.91% | 19.65% | 17.21% | 21.56% | 0.9938 | -0.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0084693 | 0.005544 | 0.3469 | 153.1292 | 152.903 | 298.444 | 309.5217 | | 21.15% | 20.97% | 18.06% | 22.44% | 1.0015 | 0.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0092817 | 0.005544 | 0.38018 | 116.2045 | 116.3931 | 231.5815 | 236.8845 | | -8.07% | -7.92% | -8.39% | -6.30% | 0.9984 | -0.16% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0092347 | 0.005544 | 0.37825 | 123.882 | 121.3855 | 243.9431 | 249.5292 | | -1.99% | -3.97% | -3.50% | -1.29% | 1.0206 | 2.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0091805 | 0.005544 | 0.37603 | 125.5768 | 125.0115 | 248.6653 | 254.3596 | | -0.65% | -1.10% | -1.64% | 0.62% | 1.0045 | 0.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0091189 | 0.005544 | 0.37351 | 126.6328 | 127.2562 | 251.467 | 257.2254 | | 0.18% | 0.68% | -0.53% | 1.75% | 0.9951 | -0.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0087996 | 0.005544 | 0.36043 | 130.0647 | 131.1101 | 256.6061 | 262.4822 | | 2.90% | 3.73% | 1.51% | 3.83% | 0.9920 | -0.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0084693 | 0.005544 | 0.3469 | 132.6866 | 132.4578 | 258.4916 | 264.4109 | | 4.97% | 4.79% | 2.25% | 4.59% | 1.0017 | 0.17% |

Table A.20. $^{99m}$Tc TRODAT 2:1 Activity Uptake Ratio

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 126.4 | 63.2 | 189.6 | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0086145 | 0.004774 | 0.35285 | 134.7488 | 66.975 | 199.9628 | 207.3274 | | 6.61% | 5.97% | 5.47% | 9.35% | 2.012 | 0.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0085708 | 0.004774 | 0.35106 | 141.6489 | 71.0809 | 210.6389 | 218.3983 | | 12.06% | 12.47% | 11.10% | 15.19% | 1.993 | -0.36% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0085205 | 0.004774 | 0.349 | 143.1434 | 74.1871 | 214.7109 | 222.6255 | | 13.25% | 17.38% | 13.24% | 17.42% | 1.929 | -3.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0084634 | 0.004774 | 0.34666 | 143.9434 | 76.3289 | 217.1691 | 225.178 | | 13.88% | 20.77% | 14.54% | 18.76% | 1.886 | -5.71% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0081671 | 0.004774 | 0.33452 | 146.3141 | 80.2091 | 221.3619 | 229.531 | | 15.75% | 26.91% | 16.75% | 21.06% | 1.824 | -8.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0078605 | 0.004774 | 0.32197 | 147.8364 | 82.1916 | 222.9692 | 231.2 | | 16.96% | 30.05% | 17.60% | 21.94% | 1.799 | -10.07% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0086145 | 0.004774 | 0.35285 | 124.2577 | 50.3542 | 173.0693 | 177.0014 | | -1.69% | -20.33% | -8.72% | -6.64% | 2.468 | 23.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0085708 | 0.004774 | 0.35106 | 130.5595 | 53.6044 | 182.334 | 186.4774 | | 3.29% | -15.18% | -3.83% | -1.65% | 2.436 | 21.78% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0085205 | 0.004774 | 0.349 | 131.674 | 56.4906 | 185.8762 | 190.103 | | 4.17% | -10.62% | -1.96% | 0.27% | 2.331 | 16.55% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0084634 | 0.004774 | 0.34666 | 132.2186 | 58.5083 | 188.0181 | 192.2956 | | 4.60% | -7.42% | -0.83% | 1.42% | 2.260 | 12.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0081671 | 0.004774 | 0.33452 | 134.1143 | 62.0895 | 191.6893 | 196.0533 | | 6.10% | -1.76% | 1.10% | 3.40% | 2.160 | 8.00% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0078605 | 0.004774 | 0.32197 | 135.393 | 63.9053 | 193.1059 | 197.5035 | | 7.11% | 1.12% | 1.85% | 4.17% | 2.119 | 5.93% |

Table A.21. $^{99m}$Tc TRODAT 5:1 Activity Uptake Ratio

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Non-SC | | | 126.40 | 25.28 | 151.68 | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0081116 | 0.004338 | 0.33225 | 135.0529 | 26.5133 | 158.0251 | 163.7083 | | 6.85% | 4.88% | 4.18% | 7.93% | 5.094 | 1.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0080705 | 0.004338 | 0.33057 | 140.9830 | 29.4446 | 166.4949 | 172.4927 | | 11.54% | 16.47% | 9.77% | 13.72% | 4.788 | -4.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0080232 | 0.004338 | 0.32863 | 142.0722 | 32.0572 | 169.699 | 175.8252 | | 12.40% | 26.81% | 11.88% | 15.92% | 4.432 | -11.36% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0079694 | 0.004338 | 0.32642 | 142.5470 | 34.0285 | 171.6355 | 177.8413 | | 12.77% | 34.61% | 13.16% | 17.25% | 4.189 | -16.22% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0076903 | 0.004338 | 0.315 | 143.9812 | 37.6585 | 174.5309 | 180.8582 | | 13.91% | 48.97% | 15.07% | 19.24% | 3.823 | -23.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0074017 | 0.004338 | 0.30317 | 144.7553 | 39.8597 | 175.7526 | 182.1342 | | 14.52% | 57.67% | 15.87% | 20.08% | 3.632 | -27.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0081116 | 0.004338 | 0.33225 | 129.1048 | 10.7460 | 136.7296 | 139.7626 | | 2.14% | -57.49% | -9.86% | -7.86% | 12.014 | 140.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0080705 | 0.004338 | 0.33057 | 134.5862 | 12.9555 | 144.0804 | 147.2818 | | 6.48% | -48.75% | -5.01% | -2.90% | 10.388 | 107.77% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0080232 | 0.004338 | 0.32863 | 135.3580 | 15.4025 | 146.8693 | 150.1397 | | 7.09% | -39.07% | -3.17% | -1.02% | 8.788 | 75.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0079694 | 0.004338 | 0.32642 | 135.6017 | 17.2900 | 148.5593 | 151.8726 | | 7.28% | -31.61% | -2.06% | 0.13% | 7.843 | 56.86% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0076903 | 0.004338 | 0.315 | 136.5961 | 20.7337 | 151.0983 | 154.4772 | | 8.07% | -17.98% | -0.38% | 1.84% | 6.588 | 31.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0074017 | 0.004338 | 0.30317 | 137.1026 | 22.8558 | 152.1781 | 155.5865 | | 8.47% | -9.59% | 0.33% | 2.58% | 5.999 | 19.97% |

# APPENDIX B

Listed below are the activity uptake estimates determined using the modified conjugate imaging technique and triple energy window scatter correction for various ROI sizes and two attenuation coefficients. This data represents the complete set of data generated from the scatter-corrected emission only and scattered-corrected emission and camera sensitivity simulations. Tables B.1 - B.55 list the data from the study using scatter-corrected emission data only. Tables B.56 - B.109 list the data from the study using scatter-corrected emission and camera sensitivity data. The activity estimates listed for the $^{123}$I radiopharmaceuticals were determined using the primary 159 keV and high-energy emissions.

Table B.1. $^{123}$I β-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 100 | 200 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.083855 | 0.055389 | 3.4347 | 74.1404 | 74.3441 | 143.9079 | 148.9374 | | -25.86% | -25.66% | -28.05% | -25.53% | 0.997 | -0.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.08343 | 0.055389 | 3.4173 | 76.8105 | 81.1271 | 150.3839 | 155.6394 | | -23.19% | -18.87% | -24.81% | -22.18% | 0.947 | -5.32% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.082941 | 0.055389 | 3.3973 | 79.6584 | 84.1088 | 153.3662 | 158.7259 | | -20.34% | -15.89% | -23.32% | -20.64% | 0.947 | -5.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.082384 | 0.055389 | 3.3745 | 81.6334 | 85.5625 | 154.2168 | 159.6063 | | -18.37% | -14.44% | -22.89% | -20.20% | 0.954 | -4.59% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0795 | 0.055389 | 3.2563 | 89.0941 | 91.3286 | 155.9446 | 161.3946 | | -10.91% | -8.67% | -22.03% | -19.30% | 0.976 | -2.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076516 | 0.055389 | 3.1341 | 92.8595 | 103.8389 | 161.1257 | 166.7555 | | -7.14% | 3.84% | -19.44% | -16.62% | 0.894 | -10.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.083855 | 0.055389 | 3.4347 | 65.4388 | 65.6434 | 127.037 | 129.9461 | | -34.56% | -34.36% | -36.48% | -35.03% | 0.997 | -0.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.08343 | 0.055389 | 3.4173 | 67.3856 | 72.064 | 132.7685 | 135.8087 | | -32.61% | -27.94% | -33.62% | -32.10% | 0.935 | -6.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.082941 | 0.055389 | 3.3973 | 69.8995 | 74.7177 | 135.4111 | 138.5118 | | -30.10% | -25.28% | -32.29% | -30.74% | 0.936 | -6.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.082384 | 0.055389 | 3.3745 | 71.6938 | 75.9796 | 136.1761 | 139.2943 | | -28.31% | -24.02% | -31.91% | -30.35% | 0.944 | -5.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0795 | 0.055389 | 3.2563 | 78.5222 | 80.998 | 137.7632 | 140.9178 | | -21.48% | -19.00% | -31.12% | -29.54% | 0.969 | -3.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076516 | 0.055389 | 3.1341 | 81.0314 | 93.1266 | 142.4094 | 145.6697 | | -18.97% | -6.87% | -28.80% | -27.17% | 0.870 | -12.99% |

Table B.2. $^{123}$I β-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 50 | 150 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.083841 | 0.055674 | 3.4341 | 73.3427 | 37.3158 | 105.2874 | 108.9415 | | -26.66% | -25.37% | -29.81% | -27.37% | 1.965 | -1.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.083416 | 0.055674 | 3.4167 | 75.0037 | 43.3171 | 110.0469 | 113.875 | | -25.00% | -13.37% | -26.64% | -24.08% | 1.732 | -13.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.082927 | 0.055674 | 3.3967 | 77.3796 | 46.1569 | 112.5789 | 116.4972 | | -22.62% | -7.69% | -24.95% | -22.34% | 1.676 | -16.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.082371 | 0.055674 | 3.3739 | 79.2624 | 47.3619 | 113.1254 | 117.063 | | -20.74% | -5.28% | -24.58% | -21.96% | 1.674 | -16.32% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.079487 | 0.055674 | 3.2558 | 86.3 | 53.3679 | 115.0158 | 119.0216 | | -13.70% | 6.74% | -23.32% | -20.65% | 1.617 | -19.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076503 | 0.055674 | 3.1336 | 89.6957 | 66.1626 | 120.296 | 124.4949 | | -10.30% | 32.33% | -19.80% | -17.00% | 1.356 | -32.22% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.083841 | 0.055674 | 3.4341 | 68.3244 | 29.3643 | 92.9348 | 95.0481 | | -31.68% | -41.27% | -38.04% | -36.63% | 2.327 | 16.34% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.083416 | 0.055674 | 3.4167 | 69.3553 | 35.1171 | 97.1503 | 99.3646 | | -30.64% | -29.77% | -35.23% | -33.76% | 1.975 | -1.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.082927 | 0.055674 | 3.3967 | 71.4172 | 37.6787 | 99.3951 | 101.8617 | | -28.58% | -24.64% | -33.74% | -32.23% | 1.895 | -5.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.082371 | 0.055674 | 3.3739 | 73.1442 | 38.7061 | 99.8912 | 102.1693 | | -26.86% | -22.59% | -33.41% | -31.89% | 1.890 | -5.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.079487 | 0.055674 | 3.2558 | 79.5294 | 44.0023 | 101.6224 | 103.9414 | | -20.47% | -12.00% | -32.25% | -30.71% | 1.807 | -9.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076503 | 0.055674 | 3.1336 | 81.64 | 56.4503 | 106.358 | 108.7904 | | -18.36% | 12.90% | -29.09% | -27.47% | 1.446 | -27.69% |

Table B.3. $^{123}$I β-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 20 | 120 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.083888 | 0.055795 | 3.436 | 72.8538 | 15.0893 | 80.9689 | 83.7188 | | -27.15% | -24.55% | -32.53% | -30.23% | 4.828 | -3.44% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.083463 | 0.055795 | 3.4186 | 73.9078 | 20.6158 | 84.6647 | 87.5627 | | -26.09% | 3.08% | -29.45% | -27.03% | 3.585 | -28.30% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.082973 | 0.055795 | 3.3986 | 76.0095 | 23.3575 | 86.8765 | 89.8576 | | -23.99% | 16.79% | -27.60% | -25.12% | 3.254 | -34.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.082417 | 0.055795 | 3.3758 | 77.8586 | 24.3888 | 87.1702 | 90.1633 | | -22.14% | 21.94% | -27.36% | -24.86% | 3.192 | -36.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.079531 | 0.055795 | 3.2576 | 84.6818 | 30.486 | 88.771 | 91.8304 | | -15.32% | 52.43% | -26.02% | -23.47% | 2.778 | -44.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076546 | 0.055795 | 3.1353 | 87.8394 | 43.4443 | 94.1371 | 97.4051 | | -12.16% | 117.22% | -21.55% | -18.83% | 2.022 | -59.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.083888 | 0.055795 | 3.436 | 70.0469 | 7.5885 | 71.4497 | 73.0394 | | -29.95% | -62.06% | -40.46% | -39.13% | 9.231 | 84.61% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.083463 | 0.055795 | 3.4186 | 70.5275 | 12.9352 | 74.7286 | 76.4043 | | -29.47% | -35.32% | -37.73% | -36.33% | 5.452 | 9.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.082973 | 0.055795 | 3.3986 | 72.3284 | 15.4279 | 76.6916 | 78.4157 | | -27.67% | -22.86% | -36.09% | -34.65% | 4.688 | -6.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.082417 | 0.055795 | 3.3758 | 74.0385 | 16.2884 | 76.9648 | 78.6961 | | -25.96% | -18.56% | -35.86% | -34.42% | 4.545 | -9.09% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.079531 | 0.055795 | 3.2576 | 80.202 | 21.6944 | 78.4421 | 80.2132 | | -19.80% | 8.47% | -34.63% | -33.16% | 3.697 | -26.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076546 | 0.055795 | 3.1353 | 82.0596 | 34.3267 | 83.2554 | 85.1491 | | -17.94% | 71.63% | -30.62% | -29.04% | 2.391 | -52.19% |

Table B.4. $^{123}$I FP -CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 40 | 80 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018554 | 0.012061 | 0.75999 | 30.1034 | 29.8497 | 59.0006 | 61.0626 | | -24.74% | -25.38% | -26.25% | -23.67% | 1.008 | 0.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01846 | 0.012061 | 0.75614 | 31.4976 | 31.9687 | 61.8289 | 63.9898 | | -21.26% | -20.08% | -22.71% | -20.01% | 0.985 | -1.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018352 | 0.012061 | 0.7517 | 32.3678 | 32.8031 | 62.8247 | 65.0203 | | -19.08% | -17.99% | -21.47% | -18.72% | 0.987 | -1.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018229 | 0.012061 | 0.74666 | 32.804 | 33.3602 | 63.1126 | 65.3183 | | -17.99% | -16.60% | -21.11% | -18.35% | 0.983 | -1.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017591 | 0.012061 | 0.72052 | 34.5348 | 34.7787 | 63.5662 | 65.7878 | | -13.66% | -13.05% | -20.54% | -17.77% | 0.993 | -0.70% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016931 | 0.012061 | 0.69347 | 35.2913 | 37.6621 | 64.6479 | 66.9071 | | -11.77% | -5.84% | -19.19% | -16.37% | 0.937 | -6.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018554 | 0.012061 | 0.75999 | 26.6026 | 26.3243 | 52.0852 | 53.2779 | | -33.49% | -34.19% | -34.89% | -33.40% | 1.011 | 1.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01846 | 0.012061 | 0.75614 | 27.7623 | 28.2734 | 54.5875 | 55.8375 | | -30.59% | -29.32% | -31.77% | -30.20% | 0.982 | -1.81% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018352 | 0.012061 | 0.7517 | 28.5385 | 29.0082 | 55.4697 | 56.7399 | | -28.65% | -27.48% | -30.66% | -29.08% | 0.984 | -1.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018229 | 0.012061 | 0.74666 | 28.9116 | 29.5192 | 55.7271 | 57.0032 | | -27.72% | -26.20% | -30.34% | -28.75% | 0.979 | -2.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017591 | 0.012061 | 0.72052 | 30.4873 | 30.7643 | 56.1421 | 57.4277 | | -23.78% | -23.09% | -29.82% | -28.22% | 0.991 | -0.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016931 | 0.012061 | 0.69347 | 30.9559 | 33.5704 | 57.1135 | 58.4213 | | -22.61% | -16.07% | -28.61% | -26.97% | 0.922 | -7.79% |

Table B.5. $^{123}$I FP -CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 20 | 60 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018543 | 0.012179 | 0.75953 | 29.7839 | 15.0413 | 43.6984 | 45.2148 | | -25.54% | -24.79% | -27.17% | -24.64% | 1.980 | -0.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018449 | 0.012179 | 0.75569 | 30.7775 | 16.846 | 45.8318 | 47.4246 | | -23.06% | -15.77% | -23.61% | -20.96% | 1.827 | -8.65% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018341 | 0.012179 | 0.75125 | 31.4642 | 17.6212 | 46.5998 | 48.22 | | -21.34% | -11.89% | -22.33% | -19.63% | 1.786 | -10.72% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018218 | 0.012179 | 0.74622 | 31.8697 | 18.0746 | 46.8213 | 48.4496 | | -20.33% | -9.63% | -21.96% | -19.25% | 1.763 | -11.84% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01758 | 0.012179 | 0.72009 | 33.4539 | 19.5448 | 47.3366 | 48.9637 | | -16.37% | -2.28% | -21.11% | -18.36% | 1.712 | -14.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01692 | 0.012179 | 0.69306 | 34.0604 | 22.5497 | 48.4749 | 50.1648 | | -14.85% | 12.75% | -19.21% | -16.39% | 1.510 | -24.48% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018543 | 0.012179 | 0.75953 | 27.7565 | 11.8152 | 38.5727 | 39.4497 | | -30.61% | -40.92% | -35.71% | -34.25% | 2.349 | 17.46% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018449 | 0.012179 | 0.75569 | 28.5526 | 13.4954 | 40.4609 | 41.3822 | | -28.62% | -32.52% | -32.57% | -31.03% | 2.116 | 5.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018341 | 0.012179 | 0.75125 | 29.1534 | 14.1905 | 41.1416 | 42.0788 | | -27.12% | -29.05% | -31.43% | -29.87% | 2.054 | 2.72% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018218 | 0.012179 | 0.74622 | 29.5059 | 14.603 | 41.3406 | 42.2626 | | -26.24% | -26.99% | -31.10% | -29.53% | 2.021 | 1.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01758 | 0.012179 | 0.72009 | 30.9313 | 15.913 | 41.8104 | 42.7636 | | -22.67% | -20.44% | -30.32% | -28.73% | 1.944 | -2.81% |
| | | | | | | | | | | | | | -100.00% |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01692 | 0.012179 | 0.69306 | 31.2378 | 18.855 | 42.8328 | 43.8112 | | -21.91% | -5.73% | -28.61% | -26.98% | 1.657 | -17.16% |

Table B.6. $^{123}$I FP -CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 8 | 48 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018551 | 0.012238 | 0.75985 | 29.5903 | 6.153 | 34.1873 | 35.3485 | | -26.02% | -23.09% | -28.78% | -26.36% | 4.8091 | -3.82% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018457 | 0.012238 | 0.756 | 30.342 | 7.7689 | 35.8746 | 37.0998 | | -24.15% | -2.89% | -25.26% | -22.71% | 3.9056 | -21.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018349 | 0.012238 | 0.75157 | 30.9156 | 8.5086 | 36.5279 | 37.7777 | | -22.71% | 6.36% | -23.90% | -21.30% | 3.6335 | -27.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018226 | 0.012238 | 0.74653 | 31.2977 | 8.8995 | 36.6563 | 37.9117 | | -21.76% | 11.24% | -23.63% | -21.02% | 3.5168 | -29.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017588 | 0.012238 | 0.72039 | 32.7605 | 10.4316 | 37.1237 | 38.3991 | | -18.10% | 30.40% | -22.66% | -20.00% | 3.1405 | -37.19% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016927 | 0.012238 | 0.69335 | 33.2605 | 13.5051 | 38.2639 | 39.5866 | | -16.85% | 68.81% | -20.28% | -17.53% | 2.4628 | -50.74% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018551 | 0.012238 | 0.75985 | 28.4471 | 3.1069 | 30.1698 | 30.8411 | | -28.88% | -61.16% | -37.15% | -35.75% | 9.1561 | 83.12% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018457 | 0.012238 | 0.756 | 29.0236 | 4.6257 | 31.6641 | 32.3725 | | -27.44% | -42.18% | -34.03% | -32.56% | 6.2744 | 25.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018349 | 0.012238 | 0.75157 | 29.5164 | 5.2972 | 32.2437 | 32.9665 | | -26.21% | -33.79% | -32.83% | -31.32% | 5.5721 | 11.44% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018226 | 0.012238 | 0.74653 | 29.8518 | 5.6507 | 32.3607 | 33.0868 | | -25.37% | -29.37% | -32.58% | -31.07% | 5.2828 | 5.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017588 | 0.012238 | 0.72039 | 31.1511 | 7.0335 | 32.789 | 33.527 | | -22.12% | -12.08% | -31.69% | -30.15% | 4.429 | -11.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016927 | 0.012238 | 0.69335 | 31.3444 | 10.0543 | 33.8141 | 34.58 | | -21.64% | 25.68% | -29.55% | -27.96% | 3.1175 | -37.65% |

Table B.7. $^{123}$I IBZM 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 84 | 168 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016821 | 0.011411 | 0.68901 | 64.0534 | 63.095 | 125.8882 | 130.2878 | | -23.75% | -24.89% | -25.07% | -22.45% | 1.0152 | 1.52% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016736 | 0.011411 | 0.68552 | 67.4984 | 66.7136 | 132.1326 | 136.7505 | | -19.64% | -20.58% | -21.35% | -18.60% | 1.0118 | 1.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016638 | 0.011411 | 0.6815 | 68.9822 | 67.9791 | 134.0298 | 138.714 | | -17.88% | -19.07% | -20.22% | -17.43% | 1.0148 | 1.48% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016526 | 0.011411 | 0.67692 | 69.457 | 69.0986 | 134.7396 | 139.4486 | | -17.31% | -17.74% | -19.80% | -16.99% | 1.0052 | 0.52% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015948 | 0.011411 | 0.65322 | 71.4023 | 70.9995 | 135.6249 | 140.3648 | | -15.00% | -15.48% | -19.27% | -16.45% | 1.0057 | 0.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015349 | 0.011411 | 0.6287 | 72.0849 | 74.1379 | 136.7005 | 141.478 | | -14.18% | -11.74% | -18.63% | -15.79% | 0.9723 | -2.77% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016821 | 0.011411 | 0.68901 | 56.6445 | 55.6035 | 111.1346 | 113.6795 | | -32.57% | -33.81% | -33.85% | -32.33% | 1.0187 | 1.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016736 | 0.011411 | 0.68552 | 59.6739 | 58.8234 | 116.6579 | 119.3293 | | -28.96% | -29.97% | -30.56% | -28.97% | 1.0145 | 1.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016638 | 0.011411 | 0.6815 | 61.0143 | 59.9205 | 118.3393 | 121.0492 | | -27.36% | -28.67% | -29.56% | -27.95% | 1.0183 | 1.83% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016526 | 0.011411 | 0.67692 | 61.3696 | 60.9813 | 118.97 | 121.6943 | | -26.94% | -27.40% | -29.18% | -27.56% | 1.0064 | 0.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015948 | 0.011411 | 0.65322 | 63.1082 | 62.6863 | 119.7705 | 122.5131 | | -24.87% | -25.37% | -28.71% | -27.08% | 1.0067 | 0.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015349 | 0.011411 | 0.6287 | 63.4789 | 65.7538 | 120.737 | 123.5017 | | -24.43% | -21.72% | -28.13% | -26.49% | 0.9654 | -3.46% |

Table B.8. $^{123}$I IBZM 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 42 | 126 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016966 | 0.011368 | 0.69493 | 63.3536 | 31.8946 | 93.8127 | 97.0679 | | -24.58% | -24.06% | -25.55% | -22.96% | 1.986 | -0.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01688 | 0.011368 | 0.69141 | 65.9479 | 34.8415 | 98.6549 | 102.0814 | | -21.49% | -17.04% | -21.70% | -18.98% | 1.893 | -5.36% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016781 | 0.011368 | 0.68735 | 67.0297 | 35.9759 | 100.1213 | 103.5997 | | -20.20% | -14.34% | -20.54% | -17.78% | 1.863 | -6.84% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016669 | 0.011368 | 0.68274 | 67.4174 | 36.87 | 100.6216 | 104.1186 | | -19.74% | -12.21% | -20.14% | -17.37% | 1.829 | -8.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016085 | 0.011368 | 0.65884 | 68.9842 | 38.8208 | 101.4288 | 104.9558 | | -17.88% | -7.57% | -19.50% | -16.70% | 1.777 | -11.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015481 | 0.011368 | 0.63411 | 69.2871 | 42.1595 | 102.4658 | 106.0337 | | -17.52% | 0.38% | -18.68% | -15.85% | 1.643 | -17.83% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016966 | 0.011368 | 0.69493 | 59.0492 | 25.0364 | 82.8113 | 84.694 | | -29.70% | -40.39% | -34.28% | -32.78% | 2.359 | 17.93% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01688 | 0.011368 | 0.69141 | 61.3065 | 27.6816 | 87.095 | 89.0769 | | -27.02% | -34.09% | -30.88% | -29.30% | 2.215 | 10.74% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016781 | 0.011368 | 0.68735 | 62.2631 | 28.6898 | 88.395 | 90.4071 | | -25.88% | -31.69% | -29.85% | -28.25% | 2.170 | 8.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016669 | 0.011368 | 0.68274 | 62.554 | 29.5385 | 88.8403 | 90.8633 | | -25.53% | -29.67% | -29.49% | -27.89% | 2.118 | 5.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016085 | 0.011368 | 0.65884 | 63.9119 | 31.3297 | 89.5714 | 91.6122 | | -23.91% | -25.41% | -28.91% | -27.29% | 2.040 | 2.00% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015481 | 0.011368 | 0.63411 | 63.8822 | 34.6356 | 90.505 | 92.5698 | | -23.95% | -17.53% | -28.17% | -26.53% | 1.844 | -7.78% |

Table B.9. $^{123}$I IBZM 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 16.8 | 100.8 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016996 | 0.011466 | 0.69614 | 62.9423 | 13.1847 | 73.9054 | 76.4163 | | -25.07% | -21.52% | -26.68% | -24.19% | 4.7739 | -4.52% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016909 | 0.011466 | 0.69261 | 65.0286 | 15.7322 | 77.8708 | 80.5263 | | -22.59% | -6.36% | -22.75% | -20.11% | 4.1335 | -17.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01681 | 0.011466 | 0.68855 | 65.8733 | 16.7908 | 79.0397 | 81.7386 | | -21.58% | -0.05% | -21.59% | -18.91% | 3.9232 | -21.54% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016698 | 0.011466 | 0.68393 | 66.215 | 17.5529 | 79.4079 | 82.1224 | | -21.17% | 4.48% | -21.22% | -18.53% | 3.7723 | -24.55% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016113 | 0.011466 | 0.65998 | 67.5731 | 19.5705 | 80.1476 | 82.8941 | | -19.56% | 16.49% | -20.49% | -17.76% | 3.4528 | -30.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015508 | 0.011466 | 0.63521 | 67.6876 | 23.0272 | 81.242 | 84.0381 | | -19.42% | 37.07% | -19.40% | -16.63% | 2.9395 | -41.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016996 | 0.011466 | 0.69614 | 60.4997 | 6.7052 | 65.2229 | 66.6745 | | -27.98% | -60.09% | -35.29% | -33.85% | 9.0228 | 80.46% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016909 | 0.011466 | 0.69261 | 62.2958 | 9.0088 | 68.7321 | 70.2676 | | -25.84% | -46.38% | -31.81% | -30.29% | 6.915 | 38.30% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01681 | 0.011466 | 0.68855 | 63.026 | 9.9662 | 69.7693 | 71.3301 | | -24.97% | -40.68% | -30.78% | -29.24% | 6.324 | 26.48% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016698 | 0.011466 | 0.68393 | 63.2842 | 10.6899 | 70.0985 | 71.6684 | | -24.66% | -36.37% | -30.46% | -28.90% | 5.92 | 18.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016113 | 0.011466 | 0.65998 | 64.4288 | 12.567 | 70.7706 | 72.3594 | | -23.30% | -25.20% | -29.79% | -28.21% | 5.1268 | 2.54% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015508 | 0.011466 | 0.63521 | 64.1988 | 16.0096 | 71.757 | 73.3751 | | -23.57% | -4.70% | -28.81% | -27.21% | 4.01 | -19.80% |

Table B.10. $^{123}$I β-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 100 | 200 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.093488 | 0.055585 | 3.8293 | 78.301 | 78.241 | 152.8461 | 158.1879 | | -21.70% | -21.76% | -23.58% | -20.91% | 1.001 | 0.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.093014 | 0.055585 | 3.8099 | 81.3178 | 84.7305 | 159.873 | 165.4602 | | -18.68% | -15.27% | -20.06% | -17.27% | 0.960 | -4.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.092469 | 0.055585 | 3.7875 | 84.2377 | 87.059 | 162.2464 | 167.9166 | | -15.76% | -12.94% | -18.88% | -16.04% | 0.968 | -3.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.091848 | 0.055585 | 3.7621 | 85.3354 | 89.9252 | 163.7306 | 169.4525 | | -14.66% | -10.07% | -18.13% | -15.27% | 0.949 | -5.10% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.088632 | 0.055585 | 3.6304 | 92.0973 | 94.9595 | 164.2006 | 169.9391 | | -7.90% | -5.04% | -17.90% | -15.03% | 0.970 | -3.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.085306 | 0.055585 | 3.4941 | 97.314 | 105.3731 | 169.1096 | 175.0191 | | -2.69% | 5.37% | -15.45% | -12.49% | 0.924 | -7.65% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.093488 | 0.055585 | 3.8293 | 69.1332 | 69.0571 | 134.9222 | 138.0119 | | -30.87% | -30.94% | -32.54% | -30.99% | 1.001 | 0.11% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.093014 | 0.055585 | 3.8099 | 71.4514 | 75.1528 | 141.1394 | 144.3713 | | -28.55% | -24.85% | -29.43% | -27.81% | 0.951 | -4.93% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.092469 | 0.055585 | 3.7875 | 74.1026 | 77.1538 | 143.2424 | 146.5225 | | -25.90% | -22.85% | -28.38% | -26.74% | 0.960 | -3.95% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.091848 | 0.055585 | 3.7621 | 74.8964 | 79.8889 | 144.5675 | 147.8778 | | -25.10% | -20.11% | -27.72% | -26.06% | 0.938 | -6.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.088632 | 0.055585 | 3.6304 | 81.0963 | 84.2661 | 145.044 | 148.3654 | | -18.90% | -15.73% | -27.48% | -25.82% | 0.962 | -3.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.085306 | 0.055585 | 3.4941 | 85.2586 | 94.1516 | 149.4421 | 152.8638 | | -14.74% | -5.85% | -25.28% | -23.57% | 0.906 | -9.45% |

Table B.11. $^{123}$I β-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 50 | 150 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.093381 | 0.055876 | 3.8249 | 77.8912 | 38.4021 | 111.6741 | 115.5475 | | -22.11% | -23.20% | -25.55% | -22.97% | 2.0283 | 1.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.092908 | 0.055876 | 3.8055 | 79.9107 | 44.011 | 116.9005 | 120.9638 | | -20.09% | -11.98% | -22.07% | -19.36% | 1.8157 | -9.22% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.092363 | 0.055876 | 3.7832 | 82.3241 | 46.1967 | 118.8787 | 123.0121 | | -17.68% | -7.61% | -20.75% | -17.99% | 1.782 | -10.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.091743 | 0.055876 | 3.7578 | 83.3339 | 48.8061 | 120.1026 | 124.2817 | | -16.67% | -2.39% | -19.93% | -17.15% | 1.7074 | -14.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.088531 | 0.055876 | 3.6262 | 89.765 | 53.9384 | 120.6646 | 124.8653 | | -10.24% | 7.88% | -19.56% | -16.76% | 1.6642 | -16.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.085208 | 0.055876 | 3.4901 | 94.6035 | 64.7687 | 125.8035 | 130.1912 | | -5.40% | 29.54% | -16.13% | -13.21% | 1.4606 | -26.97% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.093381 | 0.055876 | 3.8249 | 72.6783 | 29.9806 | 98.5671 | 100.8071 | | -27.32% | -40.04% | -34.29% | -32.80% | 2.4242 | 21.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.092908 | 0.055876 | 3.8055 | 74.1014 | 35.3105 | 103.1947 | 105.5449 | | -25.90% | -29.38% | -31.20% | -29.64% | 2.0986 | 4.93% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.092363 | 0.055876 | 3.7832 | 76.2669 | 37.2221 | 104.9487 | 107.3395 | | -23.73% | -25.56% | -30.03% | -28.44% | 2.049 | 2.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.091743 | 0.055876 | 3.7578 | 76.9978 | 39.7146 | 106.0444 | 108.4621 | | -23.00% | -20.57% | -29.30% | -27.69% | 1.9388 | -3.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.088531 | 0.055876 | 3.6262 | 82.8594 | 44.2201 | 106.6015 | 109.0331 | | -17.14% | -11.56% | -28.93% | -27.31% | 1.8738 | -6.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.085208 | 0.055876 | 3.4901 | 86.6026 | 54.556 | 111.2048 | 113.7461 | | -13.40% | 9.11% | -25.86% | -24.17% | 1.5874 | -20.63% |

Table B.12. $^{123}$I β-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 20 | 120 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.093145 | 0.056239 | 3.8152 | 77.6741 | 14.5244 | 86.0261 | 88.9404 | | -22.33% | -27.38% | -28.31% | -25.88% | 5.35 | 6.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.092674 | 0.056239 | 3.7959 | 79.0989 | 19.6169 | 90.2117 | 93.2902 | | -20.90% | -1.92% | -24.82% | -22.26% | 4.03 | -19.36% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.09213 | 0.056239 | 3.7736 | 81.211 | 21.7375 | 91.8099 | 94.9491 | | -18.79% | 8.69% | -23.49% | -20.88% | 3.74 | -25.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.091512 | 0.056239 | 3.7483 | 82.1509 | 24.2323 | 92.821 | 96.0032 | | -17.85% | 21.16% | -22.65% | -20.00% | 3.39 | -32.20% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.088308 | 0.056239 | 3.6171 | 88.3663 | 29.558 | 93.3387 | 96.5499 | | -11.63% | 47.79% | -22.22% | -19.54% | 2.99 | -40.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.084993 | 0.056239 | 3.4813 | 93.171 | 40.4673 | 98.6211 | 102.0357 | | -6.83% | 102.34% | -17.82% | -14.97% | 2.30 | -53.95% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.093145 | 0.056239 | 3.8152 | 74.831 | 6.5576 | 75.9078 | 77.5924 | | -25.17% | -67.21% | -36.74% | -35.34% | 11.41 | 128.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.092674 | 0.056239 | 3.7959 | 75.7197 | 11.4397 | 79.6188 | 81.3988 | | -24.26% | -42.80% | -33.65% | -32.17% | 6.62 | 32.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.09213 | 0.056239 | 3.7736 | 77.5942 | 13.3174 | 81.0381 | 82.8534 | | -22.41% | -33.41% | -32.47% | -30.96% | 5.83 | 16.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.091512 | 0.056239 | 3.7483 | 78.2666 | 15.7052 | 81.947 | 83.7876 | | -21.73% | -21.47% | -31.71% | -30.18% | 4.98 | -0.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.088308 | 0.056239 | 3.6171 | 83.8955 | 20.4211 | 82.467 | 84.3258 | | -16.10% | 2.11% | -31.28% | -29.73% | 4.11 | -17.83% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.084993 | 0.056239 | 3.4813 | 87.5964 | 30.8374 | 87.1998 | 89.1779 | | -12.40% | 54.19% | -27.33% | -25.69% | 2.84 | -43.19% |

Table B.13. $^{123}$I FP-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 40 | 80 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02062 | 0.012193 | 0.8446 | 31.8019 | 31.7418 | 62.7771 | 64.9711 | | -20.50% | -20.65% | -21.53% | -18.79% | 1.002 | 0.19% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020516 | 0.012193 | 0.84033 | 33.287 | 33.8596 | 65.7848 | 68.0839 | | -16.78% | -15.35% | -17.77% | -14.90% | 0.983 | -1.69% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020395 | 0.012193 | 0.8354 | 34.2262 | 34.5482 | 66.6953 | 69.0262 | | -14.43% | -13.63% | -16.63% | -13.72% | 0.991 | -0.93% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020259 | 0.012193 | 0.82979 | 34.4961 | 35.4052 | 67.1971 | 69.5455 | | -13.76% | -11.49% | -16.00% | -13.07% | 0.974 | -2.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.019549 | 0.012193 | 0.80074 | 36.0957 | 36.7237 | 67.4493 | 69.8065 | | -9.76% | -8.19% | -15.69% | -12.74% | 0.983 | -1.71% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018816 | 0.012193 | 0.77068 | 37.1447 | 39.2215 | 68.5265 | 70.9213 | | -7.14% | -1.95% | -14.34% | -11.35% | 0.947 | -5.30% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02062 | 0.012193 | 0.8446 | 28.0816 | 28.0136 | 55.4174 | 56.6864 | | -29.80% | -29.97% | -30.73% | -29.14% | 1.002 | 0.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020516 | 0.012193 | 0.84033 | 29.3312 | 29.9522 | 58.078 | 59.4079 | | -26.67% | -25.12% | -27.40% | -25.74% | 0.979 | -2.07% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020395 | 0.012193 | 0.8354 | 30.19 | 30.5361 | 58.8846 | 60.233 | | -24.53% | -23.66% | -26.39% | -24.71% | 0.989 | -1.13% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020259 | 0.012193 | 0.82979 | 30.3705 | 31.3579 | 59.331 | 60.6897 | | -24.07% | -21.61% | -25.84% | -24.14% | 0.969 | -3.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.019549 | 0.012193 | 0.80074 | 31.8245 | 32.5198 | 59.5687 | 60.9328 | | -20.44% | -18.70% | -25.54% | -23.83% | 0.979 | -2.14% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018816 | 0.012193 | 0.77068 | 32.6229 | 34.9106 | 60.5357 | 61.9218 | | -18.44% | -12.72% | -24.33% | -22.60% | 0.934 | -6.55% |

Table B.14. $^{123}$I FP-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 20 | 60 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020599 | 0.01228 | 0.84372 | 31.6338 | 15.8038 | 46.5336 | 48.1481 | | -20.92% | -20.98% | -22.44% | -19.75% | 2.002 | 0.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020494 | 0.01228 | 0.83945 | 32.7194 | 17.5684 | 48.7951 | 50.4903 | | -18.20% | -12.16% | -18.67% | -15.85% | 1.862 | -6.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020374 | 0.01228 | 0.83453 | 33.4538 | 18.1999 | 49.4994 | 51.2196 | | -16.37% | -9.00% | -17.50% | -14.63% | 1.838 | -8.09% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020238 | 0.01228 | 0.82893 | 33.6805 | 18.9578 | 49.8891 | 51.6239 | | -15.80% | -5.21% | -16.85% | -13.96% | 1.777 | -11.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.019529 | 0.01228 | 0.79991 | 35.1243 | 20.311 | 50.1523 | 51.8971 | | -12.19% | 1.56% | -16.41% | -13.50% | 1.729 | -13.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018796 | 0.01228 | 0.76988 | 36.0769 | 22.8659 | 51.2374 | 53.0226 | | -9.81% | 14.33% | -14.60% | -11.63% | 1.578 | -21.11% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020599 | 0.01228 | 0.84372 | 29.496 | 12.3808 | 41.0744 | 42.0081 | | -26.26% | -38.10% | -31.54% | -29.99% | 2.382 | 19.12% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020494 | 0.01228 | 0.83945 | 30.3867 | 14.0123 | 43.0754 | 44.056 | | -24.03% | -29.94% | -28.21% | -26.57% | 2.169 | 8.43% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020374 | 0.01228 | 0.83453 | 31.0491 | 14.5606 | 43.6996 | 44.6946 | | -22.38% | -27.20% | -27.17% | -25.51% | 2.132 | 6.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020238 | 0.01228 | 0.82893 | 31.1962 | 15.2896 | 44.0472 | 45.0508 | | -22.01% | -23.55% | -26.59% | -24.92% | 2.040 | 2.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.019529 | 0.01228 | 0.79991 | 32.4925 | 16.5006 | 44.2948 | 45.3045 | | -18.77% | -17.50% | -26.18% | -24.49% | 1.969 | -1.54% |
| | | | | | | | | | | | | | -100.00% |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018796 | 0.01228 | 0.76988 | 33.188 | 18.9581 | 45.2685 | 46.3019 | | -17.03% | -5.21% | -24.55% | -22.83% | 1.751 | -12.47% |

Table B.15. $^{123}$I FP-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 8 | 48 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020575 | 0.012348 | 0.84277 | 31.5348 | 6.2427 | 36.3909 | 37.6255 | | -21.16% | -21.97% | -24.19% | -21.61% | 5.051 | 1.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020471 | 0.012348 | 0.8385 | 32.3805 | 7.7964 | 38.191 | 39.4933 | | -19.05% | -2.55% | -20.44% | -17.72% | 4.153 | -16.93% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020351 | 0.012348 | 0.83358 | 32.9937 | 8.3939 | 38.7717 | 40.0956 | | -17.52% | 4.92% | -19.23% | -16.47% | 3.931 | -21.39% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020215 | 0.012348 | 0.82799 | 33.1971 | 9.0909 | 39.0926 | 40.4301 | | -17.01% | 13.64% | -18.56% | -15.77% | 3.652 | -26.97% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.019507 | 0.012348 | 0.799 | 34.5613 | 10.4581 | 39.3497 | 40.6998 | | -13.60% | 30.73% | -18.02% | -15.21% | 3.305 | -33.91% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018775 | 0.012348 | 0.76901 | 35.453 | 13.0632 | 40.4649 | 41.8605 | | -11.37% | 63.29% | -15.70% | -12.79% | 2.714 | -45.72% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020575 | 0.012348 | 0.84277 | 30.3462 | 3.0026 | 32.1132 | 32.8269 | | -24.13% | -62.47% | -33.10% | -31.61% | 10.107 | 102.13% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020471 | 0.012348 | 0.8385 | 31.0215 | 4.4507 | 33.707 | 34.46 | | -22.45% | -44.37% | -29.78% | -28.21% | 6.970 | 39.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020351 | 0.012348 | 0.83358 | 31.5678 | 4.9776 | 34.222 | 34.9876 | | -21.08% | -37.78% | -28.70% | -27.11% | 6.342 | 26.84% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020215 | 0.012348 | 0.82799 | 31.6976 | 5.6495 | 34.5093 | 35.2629 | | -20.76% | -29.38% | -28.11% | -26.49% | 5.611 | 12.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.019507 | 0.012348 | 0.799 | 32.9135 | 6.8819 | 34.7523 | 35.5335 | | -17.72% | -13.98% | -27.60% | -25.97% | 4.783 | -4.35% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018775 | 0.012348 | 0.76901 | 33.543 | 9.3953 | 35.7535 | 36.5614 | | -16.14% | 17.44% | -25.51% | -23.83% | 3.570 | -28.60% |

Table B.16. $^{123}$I IBZM 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 84 | 168 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018781 | 0.011653 | 0.76925 | 67.67 | 67.4978 | 134.3319 | 139.0267 | | -19.44% | -19.65% | -20.04% | -17.25% | 1.003 | 0.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018685 | 0.011653 | 0.76536 | 71.2243 | 71.2652 | 140.9261 | 145.8513 | | -15.21% | -15.16% | -16.12% | -13.18% | 0.999 | -0.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018576 | 0.011653 | 0.76087 | 72.883 | 72.3779 | 142.7893 | 147.7796 | | -13.23% | -13.84% | -15.01% | -12.04% | 1.007 | 0.70% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018451 | 0.011653 | 0.75576 | 73.2336 | 73.7715 | 143.6699 | 148.691 | | -12.82% | -12.18% | -14.48% | -11.49% | 0.993 | -0.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017805 | 0.011653 | 0.7293 | 75.0901 | 75.664 | 144.4694 | 149.5185 | | -10.61% | -9.92% | -14.01% | -11.00% | 0.992 | -0.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017137 | 0.011653 | 0.70193 | 76.033 | 78.4868 | 145.5446 | 150.6311 | | -9.48% | -6.56% | -13.37% | -10.34% | 0.969 | -3.13% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018781 | 0.011653 | 0.76925 | 59.7573 | 59.5685 | 118.5872 | 121.3028 | | -28.86% | -29.09% | -29.41% | -27.80% | 1.003 | 0.32% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018685 | 0.011653 | 0.76536 | 62.8793 | 62.9243 | 124.4205 | 127.2696 | | -25.14% | -25.09% | -25.94% | -24.24% | 0.999 | -0.07% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018576 | 0.011653 | 0.76087 | 64.4069 | 63.8535 | 126.0717 | 128.9586 | | -23.33% | -23.98% | -24.96% | -23.24% | 1.009 | 0.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018451 | 0.011653 | 0.75576 | 64.6136 | 65.1961 | 126.8537 | 129.7586 | | -23.08% | -22.39% | -24.49% | -22.76% | 0.991 | -0.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017805 | 0.011653 | 0.7293 | 66.2641 | 66.9037 | 127.5794 | 130.5009 | | -21.11% | -20.35% | -24.06% | -22.32% | 0.990 | -0.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017137 | 0.011653 | 0.70193 | 66.926 | 69.6292 | 128.5462 | 131.4898 | | -20.33% | -17.11% | -23.48% | -21.73% | 0.961 | -3.88% |

Table B.17.$^{123}$I IBZM 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 42 | 126 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018962 | 0.011508 | 0.77668 | 67.2775 | 33.913 | 100.0967 | 103.5701 | | -19.91% | -19.25% | -20.56% | -17.80% | 1.984 | -0.81% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018866 | 0.011508 | 0.77274 | 69.9801 | 36.9239 | 105.1599 | 108.8123 | | -16.69% | -12.09% | -16.54% | -13.64% | 1.895 | -5.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018755 | 0.011508 | 0.76821 | 71.1932 | 37.904 | 106.5691 | 110.271 | | -15.25% | -9.75% | -15.42% | -12.48% | 1.878 | -6.09% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018629 | 0.011508 | 0.76306 | 71.434 | 39.0762 | 107.2332 | 110.96 | | -14.96% | -6.96% | -14.89% | -11.94% | 1.828 | -8.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017977 | 0.011508 | 0.73634 | 72.8707 | 40.9742 | 107.9349 | 111.6882 | | -13.25% | -2.44% | -14.34% | -11.36% | 1.778 | -11.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017302 | 0.011508 | 0.7087 | 73.4504 | 43.9434 | 108.9381 | 112.7302 | | -12.56% | 4.63% | -13.54% | -10.53% | 1.671 | -16.43% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018962 | 0.011508 | 0.77668 | 62.7001 | 26.63 | 88.3571 | 90.366 | | -25.36% | -36.60% | -29.88% | -28.28% | 2.354 | 17.72% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018866 | 0.011508 | 0.77274 | 65.0574 | 29.3278 | 92.8368 | 94.9494 | | -22.55% | -30.17% | -26.32% | -24.64% | 2.218 | 10.91% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018755 | 0.011508 | 0.76821 | 66.1588 | 30.1707 | 94.0858 | 96.2272 | | -21.24% | -28.17% | -25.33% | -23.63% | 2.193 | 9.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018629 | 0.011508 | 0.76306 | 66.2783 | 31.307 | 94.6764 | 96.8323 | | -21.10% | -25.46% | -24.86% | -23.15% | 2.117 | 5.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017977 | 0.011508 | 0.73634 | 67.5113 | 33.0612 | 95.3151 | 97.4867 | | -19.63% | -21.28% | -24.35% | -22.63% | 2.042 | 2.10% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017302 | 0.011508 | 0.7087 | 67.7947 | 35.9691 | 96.2178 | 98.4123 | | -19.29% | -14.36% | -23.64% | -21.90% | 1.885 | -5.76% |

Table B.18.$^{123}$I IBZM 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 16.8 | 100.8 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018948 | 0.011601 | 0.77612 | 67.0622 | 13.7826 | 78.9032 | 81.5826 | | -20.16% | -17.96% | -21.72% | -19.06% | 4.866 | -2.69% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018852 | 0.011601 | 0.77219 | 69.2597 | 16.3465 | 83.0196 | 85.8489 | | -17.55% | -2.70% | -17.64% | -14.83% | 4.237 | -15.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018742 | 0.011601 | 0.76766 | 70.2146 | 17.2527 | 84.1094 | 86.9788 | | -16.41% | 2.69% | -16.56% | -13.71% | 4.070 | -18.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018616 | 0.011601 | 0.76251 | 70.4003 | 18.2989 | 84.6379 | 87.5297 | | -16.19% | 8.92% | -16.03% | -13.16% | 3.847 | -23.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017964 | 0.011601 | 0.73581 | 71.6286 | 20.2414 | 85.2709 | 88.1911 | | -14.73% | 20.48% | -15.41% | -12.51% | 3.539 | -29.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01729 | 0.011601 | 0.70819 | 72.0657 | 23.3165 | 86.3176 | 89.2846 | | -14.21% | 38.79% | -14.37% | -11.42% | 3.091 | -38.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018948 | 0.011601 | 0.77612 | 64.4838 | 6.8851 | 69.6322 | 71.1813 | | -23.23% | -59.02% | -30.92% | -29.38% | 9.366 | 87.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018852 | 0.011601 | 0.77219 | 66.3873 | 9.1942 | 73.2754 | 74.9114 | | -20.97% | -45.27% | -27.31% | -25.68% | 7.221 | 44.41% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018742 | 0.011601 | 0.76766 | 67.2413 | 9.9902 | 74.2423 | 75.9016 | | -19.95% | -40.53% | -26.35% | -24.70% | 6.731 | 34.61% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.018616 | 0.011601 | 0.76251 | 67.3183 | 11.0085 | 74.7136 | 76.386 | | -19.86% | -34.47% | -25.88% | -24.22% | 6.115 | 22.30% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017964 | 0.011601 | 0.73581 | 68.3404 | 12.8268 | 75.2923 | 76.9816 | | -18.64% | -23.65% | -25.31% | -23.63% | 5.328 | 6.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01729 | 0.011601 | 0.70819 | 68.4699 | 15.8549 | 76.2347 | 77.9515 | | -18.49% | -5.63% | -24.37% | -22.67% | 4.319 | -13.63% |

Table B.19. $^{123}$I β-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 100 | 200 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.080967 | 0.056577 | 3.3164 | 74.2607 | 72.8325 | 142.0695 | 147.0347 | | -25.74% | -27.17% | -28.97% | -26.48% | 1.020 | 1.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.080557 | 0.056577 | 3.2996 | 76.8137 | 78.9971 | 147.3112 | 152.4595 | | -23.19% | -21.00% | -26.34% | -23.77% | 0.972 | -2.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.080084 | 0.056577 | 3.2803 | 80.6494 | 81.952 | 150.8184 | 156.0893 | | -19.35% | -18.05% | -24.59% | -21.96% | 0.984 | -1.59% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.079547 | 0.056577 | 3.2583 | 83.728 | 82.5991 | 151.87 | 157.1776 | | -16.27% | -17.40% | -24.07% | -21.41% | 1.014 | 1.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076762 | 0.056577 | 3.1442 | 87.5684 | 95.0654 | 156.0819 | 161.5361 | | -12.43% | -4.93% | -21.96% | -19.23% | 0.921 | -7.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.073881 | 0.056577 | 3.0262 | 92.4776 | 107.8255 | 161.4137 | 167.0525 | | -7.52% | 7.83% | -19.29% | -16.47% | 0.858 | -14.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.080967 | 0.056577 | 3.3164 | 65.7111 | 64.1456 | 125.4175 | 128.2895 | | -34.29% | -35.85% | -37.29% | -35.86% | 1.024 | 2.44% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.080557 | 0.056577 | 3.2996 | 67.6073 | 69.968 | 130.058 | 133.0362 | | -32.39% | -30.03% | -34.97% | -33.48% | 0.966 | -3.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.080084 | 0.056577 | 3.2803 | 71.1037 | 72.4924 | 133.1667 | 136.2161 | | -28.90% | -27.51% | -33.42% | -31.89% | 0.981 | -1.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.079547 | 0.056577 | 3.2583 | 74.0625 | 72.8554 | 134.1127 | 137.1837 | | -25.94% | -27.14% | -32.94% | -31.41% | 1.017 | 1.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076762 | 0.056577 | 3.1442 | 76.6469 | 84.8609 | 137.9022 | 141.0597 | | -23.35% | -15.14% | -31.05% | -29.47% | 0.903 | -9.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.073881 | 0.056577 | 3.0262 | 80.2627 | 97.1505 | 142.6918 | 145.9579 | | -19.74% | -2.85% | -28.65% | -27.02% | 0.826 | -17.38% |

Table B.20.$^{123}$I β-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 50 | 150 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.080812 | 0.056576 | 3.3101 | 73.2582 | 36.5637 | 103.8198 | 107.4217 | | -26.74% | -26.87% | -30.79% | -28.39% | 2.004 | 0.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.080403 | 0.056576 | 3.2933 | 74.6719 | 42.1656 | 107.3484 | 111.0812 | | -25.33% | -15.67% | -28.43% | -25.95% | 1.771 | -11.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.079931 | 0.056576 | 3.274 | 77.7915 | 45.2579 | 110.5136 | 114.3584 | | -22.21% | -9.48% | -26.32% | -23.76% | 1.719 | -14.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.079395 | 0.056576 | 3.252 | 80.6887 | 45.7402 | 111.3007 | 115.1714 | | -19.31% | -8.52% | -25.80% | -23.22% | 1.764 | -11.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076615 | 0.056576 | 3.1382 | 84.4915 | 57.9204 | 115.5734 | 119.604 | | -15.51% | 15.84% | -22.95% | -20.26% | 1.459 | -27.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.073739 | 0.056576 | 3.0204 | 89.3098 | 70.7458 | 121.0455 | 125.273 | | -10.69% | 41.49% | -19.30% | -16.48% | 1.262 | -36.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.080812 | 0.056576 | 3.3101 | 68.3183 | 28.635 | 91.6426 | 93.7257 | | -31.68% | -42.73% | -38.90% | -37.52% | 2.386 | 19.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.080403 | 0.056576 | 3.2933 | 69.1479 | 34.0185 | 94.7702 | 96.9295 | | -30.85% | -31.96% | -36.82% | -35.38% | 2.033 | 1.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.079931 | 0.056576 | 3.274 | 71.9231 | 36.7512 | 97.5773 | 99.8016 | | -28.08% | -26.50% | -34.95% | -33.47% | 1.957 | -2.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.079395 | 0.056576 | 3.252 | 74.7182 | 36.9707 | 98.288 | 100.5276 | | -25.28% | -26.06% | -34.47% | -32.98% | 2.021 | 1.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076615 | 0.056576 | 3.1382 | 77.2917 | 48.6959 | 102.1336 | 104.4674 | | -22.71% | -2.61% | -31.91% | -30.36% | 1.587 | -20.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.073739 | 0.056576 | 3.0204 | 80.808 | 61.0583 | 107.0486 | 109.4982 | | -19.19% | 22.12% | -28.63% | -27.00% | 1.323 | -33.83% |

Table B.21. $^{123}$I β-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 20 | 120 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.080666 | 0.056633 | 3.3041 | 72.6669 | 14.8082 | 79.4694 | 82.1673 | | -27.33% | -25.96% | -33.78% | -31.53% | 4.907 | -1.86% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.080257 | 0.056633 | 3.2873 | 73.4021 | 20.0716 | 82.1053 | 84.9142 | | -26.60% | 0.36% | -31.58% | -29.24% | 3.657 | -26.86% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.079786 | 0.056633 | 3.268 | 76.0934 | 23.2519 | 84.999 | 87.9152 | | -23.91% | 16.26% | -29.17% | -26.74% | 3.273 | -34.55% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.079251 | 0.056633 | 3.2461 | 78.8834 | 23.6385 | 85.5087 | 88.4414 | | -21.12% | 18.19% | -28.74% | -26.30% | 3.337 | -33.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076476 | 0.056633 | 3.1325 | 82.7574 | 35.5915 | 89.7141 | 92.8188 | | -17.24% | 77.96% | -25.24% | -22.65% | 2.325 | -53.50% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.073606 | 0.056633 | 3.0149 | 87.4998 | 48.5743 | 95.3436 | 98.6603 | | -12.50% | 142.87% | -20.55% | -17.78% | 1.801 | -63.97% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.080666 | 0.056633 | 3.3041 | 69.8919 | 7.3339 | 70.1308 | 71.6906 | | -30.11% | -63.33% | -41.56% | -40.26% | 9.530 | 90.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.080257 | 0.056633 | 3.2873 | 70.087 | 12.4527 | 72.4732 | 74.0976 | | -29.91% | -37.74% | -39.61% | -38.25% | 5.628 | 12.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.079786 | 0.056633 | 3.268 | 72.4302 | 15.3158 | 75.0417 | 76.7285 | | -27.57% | -23.42% | -37.47% | -36.06% | 4.729 | -5.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.079251 | 0.056633 | 3.2461 | 75.1288 | 15.4516 | 75.5067 | 77.2034 | | -24.87% | -22.74% | -37.08% | -35.66% | 4.862 | -2.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076476 | 0.056633 | 3.1325 | 77.7945 | 26.9429 | 79.2968 | 81.0948 | | -22.21% | 34.71% | -33.92% | -32.42% | 2.887 | -42.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.073606 | 0.056633 | 3.0149 | 81.2196 | 39.4661 | 84.3533 | 86.276 | | -18.78% | 97.33% | -29.71% | -28.10% | 2.058 | -58.84% |

Table B.22. $^{123}$I FP-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 40 | 80 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01803 | 0.01251 | 0.73849 | 30.002 | 29.2188 | 58.1945 | 60.2283 | | -25.00% | -26.95% | -27.26% | -24.71% | 1.027 | 2.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017938 | 0.01251 | 0.73475 | 31.3582 | 31.161 | 60.7314 | 62.8539 | | -21.60% | -22.10% | -24.09% | -21.43% | 1.006 | 0.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017833 | 0.01251 | 0.73044 | 32.5238 | 31.9418 | 61.8416 | 64.0029 | | -18.69% | -20.15% | -22.70% | -20.00% | 1.018 | 1.82% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017713 | 0.01251 | 0.72554 | 33.2208 | 32.2598 | 62.1561 | 64.3284 | | -16.95% | -19.35% | -22.30% | -19.59% | 1.030 | 2.98% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017093 | 0.01251 | 0.70014 | 34.0103 | 35.3407 | 63.1657 | 65.3732 | | -14.97% | -11.65% | -21.04% | -18.28% | 0.962 | -3.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016452 | 0.01251 | 0.67386 | 34.9745 | 38.3456 | 64.2646 | 66.5102 | | -12.56% | -4.14% | -19.67% | -16.86% | 0.912 | -8.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01803 | 0.01251 | 0.73849 | 26.5665 | 25.7145 | 51.3744 | 52.5508 | | -33.58% | -35.71% | -35.78% | -34.31% | 1.033 | 3.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017938 | 0.01251 | 0.73475 | 27.7072 | 27.4929 | 53.6185 | 54.8464 | | -30.73% | -31.27% | -32.98% | -31.44% | 1.008 | 0.78% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017833 | 0.01251 | 0.73044 | 28.7809 | 28.1447 | 54.6019 | 55.8523 | | -28.05% | -29.64% | -31.75% | -30.18% | 1.023 | 2.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017713 | 0.01251 | 0.72554 | 29.4342 | 28.3955 | 54.8836 | 56.1404 | | -26.41% | -29.01% | -31.40% | -29.82% | 1.037 | 3.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017093 | 0.01251 | 0.70014 | 29.9163 | 31.3767 | 55.7923 | 57.0698 | | -25.21% | -21.56% | -30.26% | -28.66% | 0.953 | -4.65% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016452 | 0.01251 | 0.67386 | 30.5787 | 34.2887 | 56.7817 | 58.0817 | | -23.55% | -14.28% | -29.02% | -27.40% | 0.892 | -10.82% |

Table B.23. $^{123}$I FP-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 20 | 60 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01796 | 0.012474 | 0.73563 | 29.6018 | 14.7136 | 43.109 | 44.6045 | | -26.00% | -26.43% | -28.15% | -25.66% | 2.012 | 0.59% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017869 | 0.012474 | 0.7319 | 30.503 | 16.4303 | 44.9659 | 46.5283 | | -23.74% | -17.85% | -25.06% | -22.45% | 1.857 | -7.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017764 | 0.012474 | 0.72761 | 31.3794 | 17.2695 | 45.911 | 47.5068 | | -21.55% | -13.65% | -23.48% | -20.82% | 1.817 | -9.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017645 | 0.012474 | 0.72273 | 32.0017 | 17.5231 | 46.0956 | 47.6977 | | -20.00% | -12.38% | -23.17% | -20.50% | 1.826 | -8.69% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017027 | 0.012474 | 0.69742 | 32.816 | 20.45 | 47.0873 | 48.7274 | | -17.96% | 2.25% | -21.52% | -18.79% | 1.605 | -19.77% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016388 | 0.012474 | 0.67124 | 33.7279 | 23.5245 | 48.2649 | 49.9486 | | -15.68% | 17.62% | -19.56% | -16.75% | 1.434 | -28.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01796 | 0.012474 | 0.73563 | 27.61 | 11.5122 | 38.0536 | 38.9185 | | -30.98% | -42.44% | -36.58% | -35.14% | 2.398 | 19.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017869 | 0.012474 | 0.7319 | 28.3246 | 13.1148 | 39.697 | 40.6007 | | -29.19% | -34.43% | -33.84% | -32.33% | 2.160 | 7.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017764 | 0.012474 | 0.72761 | 29.1071 | 13.8534 | 40.5348 | 41.4579 | | -27.23% | -30.73% | -32.44% | -30.90% | 2.101 | 5.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017645 | 0.012474 | 0.72273 | 29.6927 | 14.0483 | 40.7013 | 41.6282 | | -25.77% | -29.76% | -32.16% | -30.62% | 2.114 | 5.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017027 | 0.012474 | 0.69742 | 30.213 | 16.8753 | 41.5943 | 42.5436 | | -24.47% | -15.62% | -30.68% | -29.09% | 1.790 | -10.48% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016388 | 0.012474 | 0.67124 | 30.8148 | 19.8623 | 42.6539 | 43.6288 | | -22.96% | -0.69% | -28.91% | -27.29% | 1.551 | -22.43% |

Table B.24. $^{123}$I FP-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 8 | 48 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017866 | 0.012521 | 0.7318 | 29.3704 | 6.0188 | 33.6437 | 34.7861 | | -26.57% | -24.77% | -29.91% | -27.53% | 4.880 | -2.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017776 | 0.012521 | 0.72809 | 30.0011 | 7.6032 | 35.0594 | 36.2564 | | -25.00% | -4.96% | -26.96% | -24.47% | 3.946 | -21.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017671 | 0.012521 | 0.72382 | 30.7075 | 8.48 | 35.9062 | 37.1349 | | -23.23% | 6.00% | -25.20% | -22.64% | 3.621 | -27.58% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017553 | 0.012521 | 0.71897 | 31.2856 | 8.7007 | 36.0448 | 37.2786 | | -21.79% | 8.76% | -24.91% | -22.34% | 3.596 | -28.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016938 | 0.012521 | 0.69379 | 32.1046 | 11.5761 | 37.0576 | 38.3347 | | -19.74% | 44.70% | -22.80% | -20.14% | 2.773 | -44.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016303 | 0.012521 | 0.66775 | 33.0375 | 14.6541 | 38.3062 | 39.633 | | -17.41% | 83.18% | -20.20% | -17.43% | 2.254 | -54.91% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017866 | 0.012521 | 0.7318 | 28.2438 | 2.9983 | 29.6911 | 30.3516 | | -29.39% | -62.52% | -38.14% | -36.77% | 9.420 | 88.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017776 | 0.012521 | 0.72809 | 28.7049 | 4.498 | 30.9454 | 31.6377 | | -28.24% | -43.78% | -35.53% | -34.09% | 6.382 | 27.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017671 | 0.012521 | 0.72382 | 29.3159 | 5.2907 | 31.6967 | 32.4073 | | -26.71% | -33.87% | -33.97% | -32.48% | 5.541 | 10.82% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017553 | 0.012521 | 0.71897 | 29.861 | 5.4579 | 31.8227 | 32.5364 | | -25.35% | -31.78% | -33.70% | -32.22% | 5.471 | 9.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016938 | 0.012521 | 0.69379 | 30.3905 | 8.2335 | 32.7356 | 33.4748 | | -24.02% | 2.92% | -31.80% | -30.26% | 3.691 | -26.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016303 | 0.012521 | 0.66775 | 31.0119 | 11.222 | 33.859 | 34.6274 | | -22.47% | 40.28% | -29.46% | -27.86% | 2.763 | -44.73% |

Table B.25. $^{123}$I IBZM 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 84 | 168 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017076 | 0.01189 | 0.69945 | 63.5519 | 61.6535 | 123.8875 | 128.2171 | | -24.34% | -26.60% | -26.26% | -23.68% | 1.031 | 3.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01699 | 0.01189 | 0.69591 | 66.9004 | 64.98 | 129.5384 | 134.0656 | | -20.36% | -22.64% | -22.89% | -20.20% | 1.030 | 2.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01689 | 0.01189 | 0.69182 | 68.8184 | 66.0569 | 131.4545 | 136.0485 | | -18.07% | -21.36% | -21.75% | -19.02% | 1.042 | 4.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016777 | 0.01189 | 0.68718 | 69.5545 | 66.7572 | 131.9962 | 136.6092 | | -17.20% | -20.53% | -21.43% | -18.69% | 1.042 | 4.19% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01619 | 0.01189 | 0.66312 | 70.1462 | 70.5174 | 133.2463 | 137.9031 | | -16.49% | -16.05% | -20.69% | -17.91% | 0.995 | -0.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015582 | 0.01189 | 0.63823 | 70.9651 | 73.7489 | 134.3219 | 139.0161 | | -15.52% | -12.20% | -20.05% | -17.25% | 0.962 | -3.77% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.017076 | 0.01189 | 0.69945 | 56.2961 | 54.2366 | 109.3688 | 111.8733 | | -32.98% | -35.43% | -34.90% | -33.41% | 1.038 | 3.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01699 | 0.01189 | 0.69591 | 59.2595 | 57.1791 | 114.3673 | 116.9862 | | -29.45% | -31.93% | -31.92% | -30.37% | 1.036 | 3.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01689 | 0.01189 | 0.69182 | 61.0468 | 58.0476 | 116.0645 | 118.7223 | | -27.33% | -30.90% | -30.91% | -29.33% | 1.052 | 5.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016777 | 0.01189 | 0.68718 | 61.7019 | 58.6699 | 116.5472 | 119.216 | | -26.55% | -30.15% | -30.63% | -29.04% | 1.052 | 5.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01619 | 0.01189 | 0.66312 | 61.9224 | 62.3444 | 117.672 | 120.3666 | | -26.28% | -25.78% | -29.96% | -28.35% | 0.993 | -0.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015582 | 0.01189 | 0.63823 | 62.4185 | 65.4958 | 118.6411 | 121.3578 | | -25.69% | -22.03% | -29.38% | -27.76% | 0.953 | -4.70% |

Table B.26. $^{123}$I IBZM 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 42 | 126 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016926 | 0.011669 | 0.6933 | 62.7104 | 31.1203 | 92.2861 | 95.4876 | | -25.34% | -25.90% | -26.76% | -24.22% | 2.015 | 0.75% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016841 | 0.011669 | 0.68979 | 65.1024 | 33.9719 | 96.6788 | 100.0359 | | -22.50% | -19.11% | -23.27% | -20.61% | 1.916 | -4.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016742 | 0.011669 | 0.68574 | 66.4106 | 35.1746 | 98.2904 | 101.7044 | | -20.94% | -16.25% | -21.99% | -19.28% | 1.888 | -5.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01663 | 0.011669 | 0.68115 | 66.9856 | 35.7387 | 98.6951 | 102.1236 | | -20.26% | -14.91% | -21.67% | -18.95% | 1.874 | -6.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016047 | 0.011669 | 0.6573 | 67.601 | 39.1749 | 99.8729 | 103.3476 | | -19.52% | -6.73% | -20.74% | -17.98% | 1.726 | -13.72% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015445 | 0.011669 | 0.63262 | 68.2643 | 42.51 | 101.0119 | 104.5304 | | -18.73% | 1.21% | -19.83% | -17.04% | 1.606 | -19.71% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016926 | 0.011669 | 0.6933 | 58.4934 | 24.3412 | 81.4642 | 83.3158 | | -30.37% | -42.04% | -35.35% | -33.88% | 2.403 | 20.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016841 | 0.011669 | 0.68979 | 60.5611 | 26.9133 | 85.3504 | 87.2923 | | -27.90% | -35.92% | -32.26% | -30.72% | 2.250 | 12.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016742 | 0.011669 | 0.68574 | 61.7343 | 27.9665 | 86.779 | 88.7539 | | -26.51% | -33.41% | -31.13% | -29.56% | 2.207 | 10.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01663 | 0.011669 | 0.68115 | 62.2433 | 28.4711 | 87.1405 | 89.1239 | | -25.90% | -32.21% | -30.84% | -29.27% | 2.186 | 9.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016047 | 0.011669 | 0.6573 | 62.5162 | 31.8242 | 88.202 | 90.2126 | | -25.58% | -24.23% | -30.00% | -28.40% | 1.964 | -1.78% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015445 | 0.011669 | 0.63262 | 62.8434 | 35.0965 | 89.2278 | 91.2642 | | -25.19% | -16.44% | -29.18% | -27.57% | 1.791 | -10.47% |

Table B.27. $^{123}$I IBZM 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 16.8 | 100.8 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016843 | 0.011598 | 0.68991 | 62.2037 | 12.7996 | 72.6252 | 75.0916 | | -25.95% | -23.81% | -27.95% | -25.50% | 4.860 | -2.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016758 | 0.011598 | 0.68641 | 64.0211 | 15.366 | 76.1992 | 78.7972 | | -23.78% | -8.54% | -24.41% | -21.83% | 4.166 | -16.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01666 | 0.011598 | 0.68239 | 64.9639 | 16.6429 | 77.579 | 80.2285 | | -22.66% | -0.94% | -23.04% | -20.41% | 3.903 | -21.93% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016548 | 0.011598 | 0.67781 | 65.441 | 17.1264 | 77.8606 | 80.5214 | | -22.09% | 1.94% | -22.76% | -20.12% | 3.821 | -23.58% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015969 | 0.011598 | 0.65408 | 66.0407 | 20.3925 | 78.9224 | 81.6315 | | -21.38% | 21.38% | -21.70% | -19.02% | 3.238 | -35.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015369 | 0.011598 | 0.62953 | 66.6805 | 23.7519 | 80.1551 | 82.917 | | -20.62% | 41.38% | -20.48% | -17.74% | 2.807 | -43.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016843 | 0.011598 | 0.68991 | 59.8103 | 6.4033 | 64.0939 | 65.5198 | | -28.80% | -61.89% | -36.41% | -35.00% | 9.341 | 86.81% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016758 | 0.011598 | 0.68641 | 61.3397 | 8.753 | 67.2574 | 68.7597 | | -26.98% | -47.90% | -33.28% | -31.79% | 7.008 | 40.16% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01666 | 0.011598 | 0.68239 | 62.1452 | 9.9157 | 68.4819 | 70.0142 | | -26.02% | -40.98% | -32.06% | -30.54% | 6.267 | 25.35% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016548 | 0.011598 | 0.67781 | 62.5651 | 10.3512 | 68.7346 | 70.2735 | | -25.52% | -38.39% | -31.81% | -30.28% | 6.044 | 20.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015969 | 0.011598 | 0.65408 | 62.8381 | 13.5376 | 69.6938 | 71.2612 | | -25.19% | -19.42% | -30.86% | -29.30% | 4.642 | -7.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015369 | 0.011598 | 0.62953 | 63.1376 | 16.8372 | 70.8041 | 72.4026 | | -24.84% | 0.22% | -29.76% | -28.17% | 3.750 | -25.00% |

Table B.28.123I β-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo6_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 100 | 200 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076438 | 0.056568 | 3.1309 | 70.315 | 67.0328 | 133.1668 | 137.8206 | | -29.69% | -32.97% | -33.42% | -31.09% | 1.049 | 4.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076051 | 0.056568 | 3.115 | 72.0317 | 74.5487 | 139.2743 | 144.1417 | | -27.97% | -25.45% | -30.36% | -27.93% | 0.966 | -3.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.075605 | 0.056568 | 3.0968 | 74.0063 | 78.5345 | 141.5847 | 146.5327 | | -25.99% | -21.47% | -29.21% | -26.73% | 0.942 | -5.77% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.075098 | 0.056568 | 3.076 | 76.9422 | 78.2963 | 141.469 | 146.4131 | | -23.06% | -21.70% | -29.27% | -26.79% | 0.983 | -1.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.072468 | 0.056568 | 2.9683 | 77.342 | 91.1672 | 143.588 | 148.6037 | | -22.66% | -8.83% | -28.21% | -25.70% | 0.848 | -15.16% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.069748 | 0.056568 | 2.8569 | 83.5691 | 99.4709 | 147.6695 | 152.8273 | | -16.43% | -0.53% | -26.17% | -23.59% | 0.840 | -15.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076438 | 0.056568 | 3.1309 | 62.4056 | 58.8493 | 117.5604 | 120.2524 | | -37.59% | -41.15% | -41.22% | -39.87% | 1.060 | 6.04% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076051 | 0.056568 | 3.115 | 63.3341 | 66.0947 | 122.9699 | 125.7857 | | -36.67% | -33.91% | -38.52% | -37.11% | 0.958 | -4.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.075605 | 0.056568 | 3.0968 | 64.8914 | 69.8262 | 125.0238 | 127.8866 | | -35.11% | -30.17% | -37.49% | -36.06% | 0.929 | -7.07% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.075098 | 0.056568 | 3.076 | 67.7858 | 69.3391 | 124.9328 | 127.7937 | | -32.21% | -30.66% | -37.53% | -36.10% | 0.978 | -2.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.072468 | 0.056568 | 2.9683 | 66.9104 | 82.1085 | 126.8591 | 129.7626 | | -33.09% | -17.89% | -36.57% | -35.12% | 0.815 | -18.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.069748 | 0.056568 | 2.8569 | 72.2838 | 89.8277 | 130.538 | 133.5255 | | -27.72% | -10.17% | -34.73% | -33.24% | 0.805 | -19.53% |

Table B.29. $^{123}$I β-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 50 | 150 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076338 | 0.056583 | 3.1268 | 69.5364 | 33.6856 | 97.9054 | 101.3001 | | -30.46% | -32.63% | -34.73% | -32.47% | 2.064 | 3.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.075952 | 0.056583 | 3.111 | 70.0774 | 40.691 | 102.413 | 105.9761 | | -29.92% | -18.62% | -31.72% | -29.35% | 1.722 | -13.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.075506 | 0.056583 | 3.0927 | 71.4338 | 44.7751 | 104.2846 | 107.917 | | -28.57% | -10.45% | -30.48% | -28.06% | 1.595 | -20.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.075 | 0.056583 | 3.072 | 74.0735 | 44.5923 | 103.9774 | 107.5973 | | -25.93% | -10.82% | -30.68% | -28.27% | 1.661 | -16.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.072374 | 0.056583 | 2.9644 | 74.0189 | 57.6958 | 106.3963 | 110.1117 | | -25.98% | 15.39% | -29.07% | -26.59% | 1.283 | -35.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.069657 | 0.056583 | 2.8532 | 80.0422 | 66.1128 | 110.4397 | 114.2979 | | -19.96% | 32.23% | -26.37% | -23.80% | 1.211 | -39.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076338 | 0.056583 | 3.1268 | 64.9457 | 26.1818 | 86.4228 | 88.3862 | | -35.05% | -47.64% | -42.38% | -41.08% | 2.481 | 24.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.075952 | 0.056583 | 3.111 | 64.7672 | 33.0431 | 90.4199 | 92.4811 | | -35.23% | -33.91% | -39.72% | -38.35% | 1.960 | -2.00% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.075506 | 0.056583 | 3.0927 | 65.7051 | 36.9331 | 92.0862 | 94.1878 | | -34.29% | -26.13% | -38.61% | -37.21% | 1.779 | -11.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.075 | 0.056583 | 3.072 | 68.3021 | 36.5298 | 91.825 | 93.9195 | | -31.70% | -26.94% | -38.78% | -37.39% | 1.870 | -6.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.072374 | 0.056583 | 2.9644 | 66.953 | 49.5735 | 94.0219 | 96.1731 | | -33.05% | -0.85% | -37.32% | -35.88% | 1.351 | -32.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.069657 | 0.056583 | 2.8532 | 72.1098 | 57.4254 | 97.6661 | 99.9017 | | -27.89% | 14.85% | -34.89% | -33.40% | 1.256 | -37.21% |

Table B.30.$^{123}$I β-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (micr | RStr (mic | Sum (microCi) | | | | | TEW_lo6_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 20 | 120 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076201 | 0.056657 | 3.1212 | 69.0843 | 13.6861 | 75.9607 | 78.5377 | | -30.92% | -31.57% | -36.70% | -34.55% | 5.048 | 0.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.075815 | 0.056657 | 3.1054 | 68.9271 | 20.387 | 79.4175 | 82.1403 | | -31.07% | 1.94% | -33.82% | -31.55% | 3.381 | -32.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.075371 | 0.056657 | 3.0872 | 69.916 | 24.5356 | 81.0126 | 83.802 | | -30.08% | 22.68% | -32.49% | -30.17% | 2.850 | -43.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.074865 | 0.056657 | 3.0665 | 72.4045 | 24.3823 | 80.7621 | 83.5407 | | -27.60% | 21.91% | -32.70% | -30.38% | 2.970 | -40.61% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.072244 | 0.056657 | 2.9591 | 72.1179 | 37.5975 | 82.9301 | 85.8117 | | -27.88% | 87.99% | -30.89% | -28.49% | 1.918 | -61.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.069532 | 0.056657 | 2.848 | 78.0532 | 46.1566 | 87.1278 | 90.1619 | | -21.95% | 130.78% | -27.39% | -24.87% | 1.691 | -66.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.076201 | 0.056657 | 3.1212 | 66.4832 | 6.5893 | 67.0346 | 68.5245 | | -33.52% | -67.05% | -44.14% | -42.90% | 10.090 | 101.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.075815 | 0.056657 | 3.1054 | 65.6476 | 13.2211 | 70.1071 | 71.6818 | | -34.35% | -33.89% | -41.58% | -40.27% | 4.965 | -0.69% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.075371 | 0.056657 | 3.0872 | 66.2168 | 17.2112 | 71.5307 | 73.1443 | | -33.78% | -13.94% | -40.39% | -39.05% | 3.847 | -23.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.074865 | 0.056657 | 3.0665 | 68.6627 | 16.8507 | 71.3203 | 72.9279 | | -31.34% | -15.75% | -40.57% | -39.23% | 4.075 | -18.50% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.072244 | 0.056657 | 2.9591 | 67.0731 | 30.0257 | 73.298 | 74.9667 | | -32.93% | 50.13% | -38.92% | -37.53% | 2.234 | -55.32% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.069532 | 0.056657 | 2.848 | 72.1283 | 38.0247 | 77.0788 | 78.8374 | | -27.87% | 90.12% | -35.77% | -34.30% | 1.897 | -62.06% |

Table B.31. $^{123}$I FP-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo6_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 40 | 80 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0169 | 0.012608 | 0.6922 | 28.0577 | 26.9943 | 54.1057 | 55.9965 | | -29.86% | -32.51% | -32.37% | -30.00% | 1.039 | 3.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016814 | 0.012608 | 0.6887 | 29.2077 | 29.2017 | 56.7585 | 58.7422 | | -26.98% | -27.00% | -29.05% | -26.57% | 1.000 | 0.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016715 | 0.012608 | 0.68466 | 29.8534 | 30.2562 | 57.5734 | 59.5855 | | -25.37% | -24.36% | -28.03% | -25.52% | 0.987 | -1.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016603 | 0.012608 | 0.68007 | 30.592 | 30.3007 | 57.6582 | 59.6733 | | -23.52% | -24.25% | -27.93% | -25.41% | 1.010 | 0.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016022 | 0.012608 | 0.65625 | 30.7571 | 33.3368 | 58.3212 | 60.3592 | | -23.11% | -16.66% | -27.10% | -24.55% | 0.923 | -7.74% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01542 | 0.012608 | 0.63162 | 32.0703 | 35.3649 | 59.1633 | 61.2306 | | -19.82% | -11.59% | -26.05% | -23.46% | 0.907 | -9.32% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0169 | 0.012608 | 0.6922 | 24.8762 | 23.7252 | 47.7655 | 48.8593 | | -37.81% | -40.69% | -40.29% | -38.93% | 1.049 | 4.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016814 | 0.012608 | 0.6887 | 25.7849 | 25.7877 | 50.113 | 51.2606 | | -35.54% | -35.53% | -37.36% | -35.92% | 1.000 | -0.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016715 | 0.012608 | 0.68466 | 26.3181 | 26.7625 | 50.8362 | 52.0003 | | -34.20% | -33.09% | -36.45% | -35.00% | 0.983 | -1.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016603 | 0.012608 | 0.68007 | 27.0363 | 26.7421 | 50.914 | 52.0799 | | -32.41% | -33.14% | -36.36% | -34.90% | 1.011 | 1.10% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016022 | 0.012608 | 0.65625 | 26.8996 | 29.7467 | 51.5131 | 52.6926 | | -32.75% | -25.63% | -35.61% | -34.13% | 0.904 | -9.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01542 | 0.012608 | 0.63162 | 28.0061 | 31.6512 | 52.2738 | 53.4706 | | -29.98% | -20.87% | -34.66% | -33.16% | 0.885 | -11.52% |

Table B.32. $^{123}$I FP-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 20 | 60 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01695 | 0.012514 | 0.69427 | 27.7314 | 13.6406 | 40.2525 | 41.6486 | | -30.67% | -31.80% | -32.91% | -30.59% | 2.033 | 1.65% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016864 | 0.012514 | 0.69075 | 28.4066 | 15.6387 | 42.2239 | 43.6916 | | -28.98% | -21.81% | -29.63% | -27.18% | 1.816 | -9.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016765 | 0.012514 | 0.6867 | 28.7983 | 16.7268 | 42.859 | 44.3501 | | -28.00% | -16.37% | -28.57% | -26.08% | 1.722 | -13.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016653 | 0.012514 | 0.6821 | 29.4214 | 16.7788 | 42.8722 | 44.3633 | | -26.45% | -16.11% | -28.55% | -26.06% | 1.753 | -12.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01607 | 0.012514 | 0.65821 | 29.4099 | 19.8281 | 43.3836 | 44.8963 | | -26.48% | -0.86% | -27.69% | -25.17% | 1.483 | -25.84% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015466 | 0.012514 | 0.63351 | 30.6545 | 21.8727 | 44.26 | 45.8044 | | -23.36% | 9.36% | -26.23% | -23.66% | 1.401 | -29.93% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01695 | 0.012514 | 0.69427 | 25.8791 | 10.645 | 35.5325 | 36.3399 | | -35.30% | -46.78% | -40.78% | -39.43% | 2.431 | 21.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016864 | 0.012514 | 0.69075 | 26.3411 | 12.5493 | 37.2781 | 38.127 | | -34.15% | -37.25% | -37.87% | -36.46% | 2.099 | 4.95% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016765 | 0.012514 | 0.6867 | 26.6205 | 13.5827 | 37.8426 | 38.7053 | | -33.45% | -32.09% | -36.93% | -35.49% | 1.960 | -2.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016653 | 0.012514 | 0.6821 | 27.224 | 13.5809 | 37.857 | 38.7197 | | -31.94% | -32.10% | -36.91% | -35.47% | 2.005 | 0.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01607 | 0.012514 | 0.65821 | 26.9107 | 16.6164 | 38.3228 | 39.1984 | | -32.72% | -16.92% | -36.13% | -34.67% | 1.620 | -19.02% |
| | | | | | | | | | | | | | -100.00% |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015466 | 0.012514 | 0.63351 | 27.946 | 18.5446 | 39.1134 | 40.0077 | | -30.14% | -7.28% | -34.81% | -33.32% | 1.507 | -24.65% |

Table B.33. $^{123}$I FP-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 8 | 48 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016921 | 0.012517 | 0.69309 | 27.5454 | 5.6384 | 31.5428 | 32.6138 | | -31.14% | -29.52% | -34.29% | -32.05% | 4.885 | -2.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016835 | 0.012517 | 0.68958 | 27.9387 | 7.5144 | 33.0874 | 34.2189 | | -30.15% | -6.07% | -31.07% | -28.71% | 3.718 | -25.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016737 | 0.012517 | 0.68553 | 28.1837 | 8.625 | 33.5943 | 34.747 | | -29.54% | 7.81% | -30.01% | -27.61% | 3.268 | -34.65% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016624 | 0.012517 | 0.68093 | 28.7447 | 8.684 | 33.566 | 34.7175 | | -28.14% | 8.55% | -30.07% | -27.67% | 3.310 | -33.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016042 | 0.012517 | 0.65709 | 28.6393 | 11.7711 | 34.0622 | 35.2399 | | -28.40% | 47.14% | -29.04% | -26.58% | 2.433 | -51.34% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01544 | 0.012517 | 0.63243 | 29.8345 | 13.8481 | 34.9373 | 36.1486 | | -25.41% | 73.10% | -27.21% | -24.69% | 2.154 | -56.91% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016921 | 0.012517 | 0.69309 | 26.4895 | 2.8058 | 27.8374 | 28.4566 | | -33.78% | -64.93% | -42.01% | -40.72% | 9.441 | 88.82% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016835 | 0.012517 | 0.68958 | 26.6861 | 4.6182 | 29.2068 | 29.8611 | | -33.28% | -42.27% | -39.15% | -37.79% | 5.778 | 15.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016737 | 0.012517 | 0.68553 | 26.8187 | 5.6882 | 29.6585 | 30.3252 | | -32.95% | -28.90% | -38.21% | -36.82% | 4.715 | -5.70% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016624 | 0.012517 | 0.68093 | 27.3603 | 5.6995 | 29.636 | 30.3021 | | -31.60% | -28.76% | -38.26% | -36.87% | 4.800 | -3.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016042 | 0.012517 | 0.65709 | 26.9503 | 8.7814 | 30.0901 | 30.7717 | | -32.62% | 9.77% | -37.31% | -35.89% | 3.069 | -38.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01544 | 0.012517 | 0.63243 | 27.9329 | 10.7465 | 30.8796 | 31.5811 | | -30.17% | 34.33% | -35.67% | -34.21% | 2.599 | -48.01% |

Table B.34. $^{123}$I IBZM 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo6_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 84 | 168 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016084 | 0.011772 | 0.6588 | 58.8902 | 57.03 | 114.4599 | 118.4601 | | -29.89% | -32.11% | -31.87% | -29.49% | 1.033 | 3.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016003 | 0.011772 | 0.65547 | 61.9544 | 60.5052 | 120.0836 | 124.2804 | | -26.24% | -27.97% | -28.52% | -26.02% | 1.024 | 2.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015909 | 0.011772 | 0.65162 | 63.0778 | 61.9185 | 121.5539 | 125.802 | | -24.91% | -26.29% | -27.65% | -25.12% | 1.019 | 1.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015802 | 0.011772 | 0.64725 | 63.9955 | 62.1574 | 121.8129 | 126.07 | | -23.81% | -26.00% | -27.49% | -24.96% | 1.030 | 2.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015249 | 0.011772 | 0.62459 | 64.2209 | 65.3951 | 122.3346 | 126.6101 | | -23.55% | -22.15% | -27.18% | -24.64% | 0.982 | -1.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.014676 | 0.011772 | 0.60114 | 65.2599 | 67.7285 | 123.193 | 127.4983 | | -22.31% | -19.37% | -26.67% | -24.11% | 0.964 | -3.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016084 | 0.011772 | 0.6588 | 52.1748 | 50.1626 | 101.0476 | 103.3614 | | -37.89% | -40.28% | -39.85% | -38.48% | 1.040 | 4.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016003 | 0.011772 | 0.65547 | 54.84 | 53.2832 | 106.0225 | 108.4504 | | -34.71% | -36.57% | -36.89% | -35.45% | 1.029 | 2.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015909 | 0.011772 | 0.65162 | 55.8097 | 54.5628 | 107.3256 | 109.7833 | | -33.56% | -35.04% | -36.12% | -34.65% | 1.023 | 2.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015802 | 0.011772 | 0.64725 | 56.6844 | 54.7167 | 107.5574 | 110.0203 | | -32.52% | -34.86% | -35.98% | -34.51% | 1.036 | 3.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015249 | 0.011772 | 0.62459 | 56.5888 | 57.9142 | 108.032 | 110.5059 | | -32.63% | -31.05% | -35.70% | -34.22% | 0.977 | -2.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.014676 | 0.011772 | 0.60114 | 57.3931 | 60.1477 | 108.8064 | 111.2979 | | -31.67% | -28.40% | -35.23% | -33.75% | 0.954 | -4.58% |

Table B.35. $^{123}$I IBZM 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo6_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 42 | 126 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016037 | 0.011676 | 0.65686 | 58.2293 | 28.9462 | 85.5186 | 88.4853 | | -30.68% | -31.08% | -32.13% | -29.77% | 2.012 | 0.58% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015955 | 0.011676 | 0.65354 | 60.303 | 31.9893 | 89.7461 | 92.8634 | | -28.21% | -23.84% | -28.77% | -26.30% | 1.885 | -5.75% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015862 | 0.011676 | 0.6497 | 60.9015 | 33.4812 | 90.9061 | 94.0658 | | -27.50% | -20.28% | -27.85% | -25.34% | 1.819 | -9.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015755 | 0.011676 | 0.64534 | 61.5896 | 33.741 | 91.0747 | 94.2401 | | -26.68% | -19.66% | -27.72% | -25.21% | 1.825 | -8.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015204 | 0.011676 | 0.62275 | 61.4731 | 37.0461 | 91.5322 | 94.7188 | | -26.82% | -11.80% | -27.36% | -24.83% | 1.659 | -17.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.014633 | 0.011676 | 0.59937 | 62.363 | 39.4421 | 92.349 | 95.5665 | | -25.76% | -6.09% | -26.71% | -24.15% | 1.581 | -20.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016037 | 0.011676 | 0.65686 | 54.3088 | 22.6517 | 75.4909 | 77.2067 | | -35.35% | -46.07% | -40.09% | -38.72% | 2.398 | 19.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015955 | 0.011676 | 0.65354 | 56.0414 | 25.4466 | 79.2318 | 81.0351 | | -33.28% | -39.41% | -37.12% | -35.69% | 2.202 | 10.12% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015862 | 0.011676 | 0.6497 | 56.4858 | 26.856 | 80.2615 | 82.0893 | | -32.76% | -36.06% | -36.30% | -34.85% | 2.103 | 5.16% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015755 | 0.011676 | 0.64534 | 57.1318 | 27.0534 | 80.4134 | 82.2446 | | -31.99% | -35.59% | -36.18% | -34.73% | 2.112 | 5.59% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015204 | 0.011676 | 0.62275 | 56.6871 | 30.3541 | 80.8318 | 82.6756 | | -32.52% | -27.73% | -35.85% | -34.38% | 1.868 | -6.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.014633 | 0.011676 | 0.59937 | 57.3339 | 32.667 | 81.5691 | 83.4312 | | -31.75% | -22.22% | -35.26% | -33.78% | 1.755 | -12.24% |

Table B.36. $^{123}$I IBZM 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo6_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 16.8 | 100.8 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016042 | 0.011602 | 0.65707 | 57.8276 | 12.0899 | 67.391 | 69.6804 | | -31.16% | -28.04% | -33.14% | -30.87% | 4.783 | -4.34% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01596 | 0.011602 | 0.65374 | 59.3039 | 14.8727 | 70.7697 | 73.1854 | | -29.40% | -11.47% | -29.79% | -27.40% | 3.987 | -20.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015867 | 0.011602 | 0.64991 | 59.5863 | 16.4093 | 71.6624 | 74.1145 | | -29.06% | -2.33% | -28.91% | -26.47% | 3.631 | -27.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01576 | 0.011602 | 0.64555 | 60.1385 | 16.6795 | 71.7533 | 74.2092 | | -28.41% | -0.72% | -28.82% | -26.38% | 3.606 | -27.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015209 | 0.011602 | 0.62294 | 59.8319 | 20.01 | 72.1234 | 74.6044 | | -28.77% | 19.11% | -28.45% | -25.99% | 2.990 | -40.20% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.014638 | 0.011602 | 0.59956 | 60.6373 | 22.4472 | 72.9585 | 75.4749 | | -27.81% | 33.61% | -27.62% | -25.12% | 2.701 | -45.97% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.016042 | 0.011602 | 0.65707 | 55.5845 | 6.1397 | 59.4751 | 60.7988 | | -33.83% | -63.45% | -41.00% | -39.68% | 9.053 | 81.07% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01596 | 0.011602 | 0.65374 | 56.755 | 8.7384 | 62.467 | 63.8639 | | -32.43% | -47.99% | -38.03% | -36.64% | 6.495 | 29.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015867 | 0.011602 | 0.64991 | 56.8834 | 10.2235 | 63.2613 | 64.6795 | | -32.28% | -39.15% | -37.24% | -35.83% | 5.564 | 11.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.01576 | 0.011602 | 0.64555 | 57.3944 | 10.4444 | 63.3447 | 64.7651 | | -31.67% | -37.83% | -37.16% | -35.75% | 5.495 | 9.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.015209 | 0.011602 | 0.62294 | 56.7582 | 13.7895 | 63.6869 | 65.1222 | | -32.43% | -17.92% | -36.82% | -35.39% | 4.116 | -17.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.014638 | 0.011602 | 0.59956 | 57.3153 | 16.1524 | 64.4409 | 65.8971 | | -31.77% | -3.85% | -36.07% | -34.63% | 3.548 | -29.03% |

Table B.37. $^{123}$I β-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi0 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 100 | 200 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12229 | 0.054287 | 5.0091 | 78.1917 | 84.2076 | 159.0344 | 164.592 | | -21.81% | -15.79% | -20.48% | -17.70% | 0.929 | -7.14% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12167 | 0.054287 | 4.9837 | 80.5542 | 91.4762 | 166.3394 | 172.1512 | | -19.45% | -8.52% | -16.83% | -13.92% | 0.881 | -11.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12096 | 0.054287 | 4.9545 | 82.9754 | 94.0088 | 168.6161 | 174.5076 | | -17.02% | -5.99% | -15.69% | -12.75% | 0.883 | -11.74% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12015 | 0.054287 | 4.9213 | 83.4723 | 97.005 | 169.5579 | 175.4816 | | -16.53% | -3.00% | -15.22% | -12.26% | 0.860 | -13.95% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11594 | 0.054287 | 4.749 | 88.1457 | 102.6442 | 169.187 | 175.0975 | | -11.85% | 2.64% | -15.41% | -12.45% | 0.859 | -14.13% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11159 | 0.054287 | 4.5707 | 92.6631 | 111.984 | 173.5471 | 179.6085 | | -7.34% | 11.98% | -13.23% | -10.20% | 0.827 | -17.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12229 | 0.054287 | 5.0091 | 68.4332 | 74.9282 | 140.3867 | 143.6012 | | -31.57% | -25.07% | -29.81% | -28.20% | 0.913 | -8.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12167 | 0.054287 | 4.9837 | 70.0291 | 81.8565 | 146.8497 | 150.2116 | | -29.97% | -18.14% | -26.58% | -24.89% | 0.856 | -14.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12096 | 0.054287 | 4.9545 | 72.167 | 84.1099 | 148.8677 | 152.2758 | | -27.83% | -15.89% | -25.57% | -23.86% | 0.858 | -14.20% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12015 | 0.054287 | 4.9213 | 72.353 | 87.0344 | 149.7113 | 153.1383 | | -27.65% | -12.97% | -25.14% | -23.43% | 0.831 | -16.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11594 | 0.054287 | 4.749 | 76.4149 | 92.2183 | 149.4324 | 152.8529 | | -23.59% | -7.78% | -25.28% | -23.57% | 0.829 | -17.14% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |

Table B.38. $^{123}$I β-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_h0 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 50 | 150 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11921 | 0.05459 | 4.8827 | 78.5089 | 39.8647 | 113.925 | 117.8788 | | -21.49% | -20.27% | -24.05% | -21.41% | 1.969 | -1.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1186 | 0.05459 | 4.8579 | 80.0302 | 45.634 | 118.8821 | 123.0167 | | -19.97% | -8.73% | -20.75% | -17.99% | 1.754 | -12.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11791 | 0.05459 | 4.8294 | 82.0671 | 47.6066 | 120.4433 | 124.6334 | | -17.93% | -4.79% | -19.70% | -16.91% | 1.724 | -13.81% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11712 | 0.05459 | 4.797 | 82.729 | 49.8546 | 120.9572 | 125.1679 | | -17.27% | -0.29% | -19.36% | -16.55% | 1.659 | -17.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11301 | 0.05459 | 4.6291 | 87.6732 | 54.2897 | 120.1824 | 124.3682 | | -12.33% | 8.58% | -19.88% | -17.09% | 1.615 | -19.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10877 | 0.05459 | 4.4553 | 92.1576 | 63.3017 | 124.5007 | 128.8431 | | -7.84% | 26.60% | -17.00% | -14.10% | 1.456 | -27.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11921 | 0.05459 | 4.8827 | 73.1393 | 31.3558 | 100.5548 | 102.8412 | | -26.86% | -37.29% | -32.96% | -31.44% | 2.333 | 16.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1186 | 0.05459 | 4.8579 | 74.0562 | 36.893 | 104.9446 | 107.3361 | | -25.94% | -26.21% | -30.04% | -28.44% | 2.007 | 0.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11791 | 0.05459 | 4.8294 | 75.8704 | 38.6336 | 106.3296 | 108.7532 | | -24.13% | -22.73% | -29.11% | -27.50% | 1.964 | -1.81% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11712 | 0.05459 | 4.797 | 76.2936 | 40.8042 | 106.7954 | 109.2313 | | -23.71% | -18.39% | -28.80% | -27.18% | 1.870 | -6.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11301 | 0.05459 | 4.6291 | 80.7407 | 44.7696 | 106.1565 | 108.579 | | -19.26% | -10.46% | -29.23% | -27.61% | 1.803 | -9.83% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10877 | 0.05459 | 4.4553 | 84.3095 | 53.3212 | 110.023 | 112.5374 | | -15.69% | 6.64% | -26.65% | -24.98% | 1.581 | -20.94% |

Table B.39.$^{123}$I β-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_h0 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 100 | 20 | 120 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11735 | 0.05476 | 4.8067 | 78.6999 | 13.2566 | 85.6572 | 88.5517 | | -21.30% | -33.72% | -28.62% | -26.21% | 5.937 | 18.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11676 | 0.05476 | 4.7824 | 79.714 | 18.1274 | 89.231 | 92.2693 | | -20.29% | -9.36% | -25.64% | -23.11% | 4.397 | -12.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11607 | 0.05476 | 4.7543 | 81.4959 | 19.7867 | 90.1821 | 93.258 | | -18.50% | -1.07% | -24.85% | -22.29% | 4.119 | -17.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11529 | 0.05476 | 4.7224 | 82.1813 | 21.6415 | 90.3685 | 93.4577 | | -17.82% | 8.21% | -24.69% | -22.12% | 3.797 | -24.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11126 | 0.05476 | 4.5571 | 87.1522 | 25.508 | 89.1781 | 92.2362 | | -12.85% | 27.54% | -25.68% | -23.14% | 3.417 | -31.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10708 | 0.05476 | 4.386 | 91.6223 | 34.3167 | 93.5302 | 96.7579 | | -8.38% | 71.58% | -22.06% | -19.37% | 2.670 | -46.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11735 | 0.05476 | 4.8067 | 75.9637 | 5.2106 | 75.5796 | 77.2527 | | -24.04% | -73.95% | -37.02% | -35.62% | 14.579 | 191.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11676 | 0.05476 | 4.7824 | 76.4707 | 9.9149 | 78.7501 | 80.5067 | | -23.53% | -50.43% | -34.37% | -32.91% | 7.713 | 54.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11607 | 0.05476 | 4.7543 | 78.0644 | 11.3725 | 79.596 | 81.3746 | | -21.94% | -43.14% | -33.67% | -32.19% | 6.864 | 37.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11529 | 0.05476 | 4.7224 | 78.55 | 13.1532 | 79.7738 | 81.5604 | | -21.45% | -34.23% | -33.52% | -32.03% | 5.972 | 19.44% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11126 | 0.05476 | 4.5571 | 83.0791 | 16.5513 | 78.7657 | 80.5353 | | -16.92% | -17.24% | -34.36% | -32.89% | 5.019 | 0.39% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10708 | 0.05476 | 4.386 | 86.654 | 24.8987 | 82.6633 | 84.5323 | | -13.35% | 24.49% | -31.11% | -29.56% | 3.480 | -30.39% |

Table B.40. $^{123}$I FP-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi0 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 40 | 80 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025969 | 0.012362 | 1.0637 | 31.7964 | 31.7102 | 62.7441 | 64.937 | | -20.51% | -20.72% | -21.57% | -18.83% | 1.003 | 0.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025837 | 0.012362 | 1.0583 | 33.1671 | 33.8171 | 65.6618 | 67.9566 | | -17.08% | -15.46% | -17.92% | -15.05% | 0.981 | -1.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025686 | 0.012362 | 1.0521 | 34.015 | 34.4553 | 66.4425 | 68.7646 | | -14.96% | -13.86% | -16.95% | -14.04% | 0.987 | -1.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025514 | 0.012362 | 1.045 | 34.1786 | 35.2579 | 66.8 | 69.1345 | | -14.55% | -11.86% | -16.50% | -13.58% | 0.969 | -3.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02462 | 0.012362 | 1.0084 | 35.4654 | 36.4602 | 66.7302 | 69.0623 | | -11.34% | -8.85% | -16.59% | -13.67% | 0.973 | -2.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023696 | 0.012362 | 0.97059 | 36.4432 | 38.6802 | 67.6592 | 70.0237 | | -8.89% | -3.30% | -15.43% | -12.47% | 0.942 | -5.78% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025969 | 0.012362 | 1.0637 | 28.0789 | 27.9836 | 55.3884 | 56.6567 | | -29.80% | -30.04% | -30.76% | -29.18% | 1.003 | 0.34% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025837 | 0.012362 | 1.0583 | 29.2169 | 29.9228 | 57.9694 | 59.2969 | | -26.96% | -25.19% | -27.54% | -25.88% | 0.976 | -2.36% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025686 | 0.012362 | 1.0521 | 29.9906 | 30.4663 | 58.661 | 60.0042 | | -25.02% | -23.83% | -26.67% | -24.99% | 0.984 | -1.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025514 | 0.012362 | 1.045 | 30.0717 | 31.2448 | 58.9794 | 60.3299 | | -24.82% | -21.89% | -26.28% | -24.59% | 0.962 | -3.75% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02462 | 0.012362 | 1.0084 | 31.2257 | 32.3225 | 58.929 | 60.2784 | | -21.94% | -19.19% | -26.34% | -24.65% | 0.966 | -3.39% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023696 | 0.012362 | 0.97059 | 31.9795 | 34.4427 | 59.7623 | 61.1308 | | -20.05% | -13.89% | -25.30% | -23.59% | 0.928 | -7.15% |

Table B.41. $^{123}$I FP-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi0 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 40 | 80 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025969 | 0.012362 | 1.0637 | 31.7964 | 31.7102 | 62.7441 | 64.937 | | -20.51% | -20.72% | -21.57% | -18.83% | 1.003 | 0.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025837 | 0.012362 | 1.0583 | 33.1671 | 33.8171 | 65.6618 | 67.9566 | | -17.08% | -15.46% | -17.92% | -15.05% | 0.981 | -1.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025686 | 0.012362 | 1.0521 | 34.015 | 34.4553 | 66.4425 | 68.7646 | | -14.96% | -13.86% | -16.95% | -14.04% | 0.987 | -1.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025514 | 0.012362 | 1.045 | 34.1786 | 35.2579 | 66.8 | 69.1345 | | -14.55% | -11.86% | -16.50% | -13.58% | 0.969 | -3.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02462 | 0.012362 | 1.0084 | 35.4654 | 36.4602 | 66.7302 | 69.0623 | | -11.34% | -8.85% | -16.59% | -13.67% | 0.973 | -2.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023696 | 0.012362 | 0.97059 | 36.4432 | 38.6802 | 67.6592 | 70.0237 | | -8.89% | -3.30% | -15.43% | -12.47% | 0.942 | -5.78% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025969 | 0.012362 | 1.0637 | 28.0789 | 27.9836 | 55.3884 | 56.6567 | | -29.80% | -30.04% | -30.76% | -29.18% | 1.003 | 0.34% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025837 | 0.012362 | 1.0583 | 29.2169 | 29.9228 | 57.9694 | 59.2969 | | -26.96% | -25.19% | -27.54% | -25.88% | 0.976 | -2.36% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025686 | 0.012362 | 1.0521 | 29.9906 | 30.4663 | 58.661 | 60.0042 | | -25.02% | -23.83% | -26.67% | -24.99% | 0.984 | -1.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025514 | 0.012362 | 1.045 | 30.0717 | 31.2448 | 58.9794 | 60.3299 | | -24.82% | -21.89% | -26.28% | -24.59% | 0.962 | -3.75% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02462 | 0.012362 | 1.0084 | 31.2257 | 32.3225 | 58.929 | 60.2784 | | -21.94% | -19.19% | -26.34% | -24.65% | 0.966 | -3.39% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023696 | 0.012362 | 0.97059 | 31.9795 | 34.4427 | 59.7623 | 61.1308 | | -20.05% | -13.89% | -25.30% | -23.59% | 0.928 | -7.15% |

Table B.42. $^{123}$I FP-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi0 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 20 | 60 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025536 | 0.012396 | 1.0459 | 31.7171 | 15.6206 | 46.4387 | 48.0494 | | -20.71% | -21.90% | -22.60% | -19.92% | 2.030 | 1.52% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025406 | 0.012396 | 1.0407 | 32.7318 | 17.3249 | 48.5846 | 50.2722 | | -18.17% | -13.38% | -19.03% | -16.21% | 1.889 | -5.54% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025257 | 0.012396 | 1.0345 | 33.4142 | 17.8591 | 49.1569 | 50.8646 | | -16.46% | -10.70% | -18.07% | -15.23% | 1.871 | -6.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025088 | 0.012396 | 1.0276 | 33.5779 | 18.5158 | 49.398 | 51.1151 | | -16.06% | -7.42% | -17.67% | -14.81% | 1.813 | -9.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02421 | 0.012396 | 0.99163 | 34.8486 | 19.5876 | 49.3297 | 51.0451 | | -12.88% | -2.06% | -17.78% | -14.92% | 1.779 | -11.04% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023301 | 0.012396 | 0.9544 | 35.8415 | 21.7258 | 50.2739 | 52.0244 | | -10.40% | 8.63% | -16.21% | -13.29% | 1.650 | -17.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025536 | 0.012396 | 1.0459 | 29.5958 | 12.1928 | 40.9906 | 41.9221 | | -26.01% | -39.04% | -31.68% | -30.13% | 2.427 | 21.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025406 | 0.012396 | 1.0407 | 30.4227 | 13.7718 | 42.8894 | 43.8654 | | -23.94% | -31.14% | -28.52% | -26.89% | 2.209 | 10.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025257 | 0.012396 | 1.0345 | 31.0433 | 14.2295 | 43.3964 | 44.3842 | | -22.39% | -28.85% | -27.67% | -26.03% | 2.182 | 9.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025088 | 0.012396 | 1.0276 | 31.1385 | 14.8649 | 43.6123 | 44.6056 | | -22.15% | -25.68% | -27.31% | -25.66% | 2.095 | 4.74% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02421 | 0.012396 | 0.99163 | 32.2893 | 15.8145 | 43.5631 | 44.5557 | | -19.28% | -20.93% | -27.39% | -25.74% | 2.042 | 2.09% |
| | | | | | | | | | | | | | -100.00% |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023301 | 0.012396 | 0.9544 | 33.0657 | 17.8517 | 44.4099 | 45.423 | | -17.34% | -10.74% | -25.98% | -24.30% | 1.852 | -7.39% |

Table B.43. $^{123}$I FP-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 40 | 8 | 48 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025239 | 0.012468 | 1.0338 | 31.6759 | 5.9729 | 36.2399 | 37.4679 | | -20.81% | -25.34% | -24.50% | -21.94% | 5.303 | 6.07% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025111 | 0.012468 | 1.0286 | 32.4781 | 7.4382 | 37.9277 | 39.2193 | | -18.80% | -7.02% | -20.98% | -18.29% | 4.366 | -12.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024964 | 0.012468 | 1.0225 | 33.0654 | 7.9102 | 38.3698 | 39.6779 | | -17.34% | -1.12% | -20.06% | -17.34% | 4.180 | -16.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024796 | 0.012468 | 1.0157 | 33.2367 | 8.4788 | 38.5455 | 39.862 | | -16.91% | 5.99% | -19.70% | -16.95% | 3.920 | -21.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023928 | 0.012468 | 0.9801 | 34.5228 | 9.4726 | 38.4579 | 39.7741 | | -13.69% | 18.41% | -19.88% | -17.14% | 3.644 | -27.11% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02303 | 0.012468 | 0.94331 | 35.5459 | 11.5703 | 39.4131 | 40.7683 | | -11.14% | 44.63% | -17.89% | -15.07% | 3.072 | -38.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025239 | 0.012468 | 1.0338 | 30.5114 | 2.7236 | 31.9793 | 32.6892 | | -23.72% | -65.96% | -33.38% | -31.90% | 11.203 | 124.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025111 | 0.012468 | 1.0286 | 31.1529 | 4.0888 | 33.4737 | 34.2205 | | -22.12% | -48.89% | -30.26% | -28.71% | 7.619 | 52.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024964 | 0.012468 | 1.0225 | 31.6857 | 4.4951 | 33.866 | 34.6224 | | -20.79% | -43.81% | -29.45% | -27.87% | 7.049 | 40.98% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024796 | 0.012468 | 1.0157 | 31.7967 | 5.0432 | 34.0246 | 34.7859 | | -20.51% | -36.96% | -29.12% | -27.53% | 6.305 | 26.10% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023928 | 0.012468 | 0.9801 | 32.9706 | 5.9137 | 33.9592 | 34.7207 | | -17.57% | -26.08% | -29.25% | -27.67% | 5.575 | 11.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02303 | 0.012468 | 0.94331 | 33.781 | 7.9071 | 34.8165 | 35.6008 | | -15.55% | -1.16% | -27.47% | -25.83% | 4.272 | -14.56% |

Table B.44.$^{123}$I IBZM 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 84 | 168 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026029 | 0.011882 | 1.0662 | 67.7616 | 67.5753 | 134.474 | 139.1738 | | -19.33% | -19.55% | -19.96% | -17.16% | 1.003 | 0.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025897 | 0.011882 | 1.0608 | 71.1875 | 71.3448 | 140.9399 | 145.8656 | | -15.25% | -15.07% | -16.11% | -13.18% | 0.998 | -0.22% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025745 | 0.011882 | 1.0545 | 72.7302 | 72.4403 | 142.6562 | 147.6419 | | -13.42% | -13.76% | -15.09% | -12.12% | 1.004 | 0.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025573 | 0.011882 | 1.0475 | 72.9822 | 73.7521 | 143.3888 | 148.4001 | | -13.12% | -12.20% | -14.65% | -11.67% | 0.990 | -1.04% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024677 | 0.011882 | 1.0108 | 74.5456 | 75.4737 | 143.905 | 148.9343 | | -11.26% | -10.15% | -14.34% | -11.35% | 0.988 | -1.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023751 | 0.011882 | 0.97284 | 75.3863 | 78.081 | 144.8661 | 149.9289 | | -10.25% | -7.05% | -13.77% | -10.76% | 0.965 | -3.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026029 | 0.011882 | 1.0662 | 59.8391 | 59.6359 | 118.7126 | 121.431 | | -28.76% | -29.00% | -29.34% | -27.72% | 1.003 | 0.34% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025897 | 0.011882 | 1.0608 | 62.8346 | 63.0065 | 124.4323 | 127.2817 | | -25.20% | -24.99% | -25.93% | -24.24% | 0.997 | -0.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025745 | 0.011882 | 1.0545 | 64.2493 | 63.9303 | 125.9528 | 128.8371 | | -23.51% | -23.89% | -25.03% | -23.31% | 1.005 | 0.50% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025573 | 0.011882 | 1.0475 | 64.3669 | 65.2018 | 126.6035 | 129.5026 | | -23.37% | -22.38% | -24.64% | -22.92% | 0.987 | -1.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024677 | 0.011882 | 1.0108 | 65.7425 | 66.7686 | 127.0747 | 129.9846 | | -21.74% | -20.51% | -24.36% | -22.63% | 0.985 | -1.54% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023751 | 0.011882 | 0.97284 | 66.3223 | 69.2873 | 127.938 | 130.8676 | | -21.04% | -17.52% | -23.85% | -22.10% | 0.957 | -4.28% |

Table B.45. $^{123}$I IBZM 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 42 | 126 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025307 | 0.011662 | 1.0366 | 67.5633 | 33.6752 | 100.1128 | 103.586 | | -19.57% | -19.82% | -20.55% | -17.79% | 2.006 | 0.32% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025179 | 0.011662 | 1.0313 | 70.2315 | 36.5859 | 105.0458 | 108.6933 | | -16.39% | -12.89% | -16.63% | -13.74% | 1.920 | -4.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025031 | 0.011662 | 1.0253 | 71.4137 | 37.4521 | 106.3065 | 109.9982 | | -14.98% | -10.83% | -15.63% | -12.70% | 1.907 | -4.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024864 | 0.011662 | 1.0184 | 71.6527 | 38.4461 | 106.8294 | 110.5409 | | -14.70% | -8.46% | -15.21% | -12.27% | 1.864 | -6.81% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023993 | 0.011662 | 0.98275 | 73.1509 | 39.8106 | 107.2096 | 110.9355 | | -12.92% | -5.21% | -14.91% | -11.96% | 1.837 | -8.13% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023092 | 0.011662 | 0.94586 | 73.9931 | 42.1404 | 108.0685 | 111.8274 | | -11.91% | 0.33% | -14.23% | -11.25% | 1.756 | -12.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025307 | 0.011662 | 1.0366 | 63.0041 | 26.3684 | 88.371 | 90.3798 | | -25.00% | -37.22% | -29.86% | -28.27% | 2.389 | 19.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025179 | 0.011662 | 1.0313 | 65.3376 | 28.9708 | 92.7354 | 94.8452 | | -22.22% | -31.02% | -26.40% | -24.73% | 2.255 | 12.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025031 | 0.011662 | 1.0253 | 66.4196 | 29.7046 | 93.8527 | 95.9881 | | -20.93% | -29.27% | -25.51% | -23.82% | 2.236 | 11.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024864 | 0.011662 | 1.0184 | 66.555 | 30.665 | 94.3179 | 96.4649 | | -20.77% | -26.99% | -25.14% | -23.44% | 2.170 | 8.52% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023993 | 0.011662 | 0.98275 | 67.9009 | 31.8836 | 94.6681 | 96.8238 | | -19.17% | -24.09% | -24.87% | -23.16% | 2.130 | 6.48% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023092 | 0.011662 | 0.94586 | 68.5085 | 34.1264 | 95.4402 | 97.6153 | | -18.44% | -18.75% | -24.25% | -22.53% | 2.007 | 0.37% |

Table B.46. $^{123}$I IBZM 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 84 | 16.8 | 100.8 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024742 | 0.011734 | 1.0134 | 67.4662 | 13.3574 | 78.8298 | 81.5042 | | -19.68% | -20.49% | -21.80% | -19.14% | 5.051 | 1.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024617 | 0.011734 | 1.0083 | 69.6861 | 15.7603 | 82.81 | 85.6291 | | -17.04% | -6.19% | -17.85% | -15.05% | 4.422 | -11.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024472 | 0.011734 | 1.0024 | 70.6606 | 16.4961 | 83.759 | 86.6126 | | -15.88% | -1.81% | -16.91% | -14.07% | 4.283 | -14.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024308 | 0.011734 | 0.99565 | 70.9025 | 17.307 | 84.1544 | 87.025 | | -15.59% | 3.02% | -16.51% | -13.67% | 4.097 | -18.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023457 | 0.011734 | 0.96079 | 72.3913 | 18.5079 | 84.4683 | 87.3535 | | -13.82% | 10.17% | -16.20% | -13.34% | 3.911 | -21.77% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022576 | 0.011734 | 0.92473 | 73.2666 | 20.7018 | 85.3166 | 88.2389 | | -12.78% | 23.23% | -15.36% | -12.46% | 3.539 | -29.22% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024742 | 0.011734 | 1.0134 | 64.9225 | 6.4274 | 69.5666 | 71.1127 | | -22.71% | -61.74% | -30.99% | -29.45% | 10.101 | 102.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024617 | 0.011734 | 1.0083 | 66.8643 | 8.5757 | 73.0891 | 74.7192 | | -20.40% | -48.95% | -27.49% | -25.87% | 7.797 | 55.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024472 | 0.011734 | 1.0024 | 67.7543 | 9.2019 | 73.931 | 75.5812 | | -19.34% | -45.23% | -26.66% | -25.02% | 7.363 | 47.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024308 | 0.011734 | 0.99565 | 67.9102 | 9.9823 | 74.284 | 75.944 | | -19.15% | -40.58% | -26.31% | -24.66% | 6.803 | 36.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023457 | 0.011734 | 0.96079 | 69.2628 | 11.0391 | 74.5757 | 76.2446 | | -17.54% | -34.29% | -26.02% | -24.36% | 6.274 | 25.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022576 | 0.011734 | 0.92473 | 69.9166 | 13.1431 | 75.3388 | 77.0294 | | -16.77% | -21.77% | -25.26% | -23.58% | 5.320 | 6.39% |

Table B.47. $^{99m}$Tc TRODAT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 114-126 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 126.4 | 126.4 | 252.8 | | | | | 114-126 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024309 | 0.004264 | 0.099571 | 122.1541 | 121.9801 | 242.5674 | 251.5711 | | -3.36% | -3.50% | -4.05% | -0.49% | 1.001 | 0.14% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024186 | 0.004264 | 0.099067 | 129.0229 | 126.97 | 253.6408 | 263.0555 | | 2.08% | 0.45% | 0.33% | 4.06% | 1.016 | 1.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024044 | 0.004264 | 0.098486 | 129.9295 | 130.3973 | 256.9172 | 266.4536 | | 2.79% | 3.16% | 1.63% | 5.40% | 0.996 | -0.36% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0023883 | 0.004264 | 0.097825 | 130.2773 | 132.199 | 258.1007 | 267.6809 | | 3.07% | 4.59% | 2.10% | 5.89% | 0.985 | -1.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0023047 | 0.004264 | 0.0944 | 131.4717 | 134.292 | 258.559 | 268.1562 | | 4.01% | 6.24% | 2.28% | 6.07% | 0.979 | -2.10% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0022182 | 0.004264 | 0.090857 | 132.8004 | 134.8142 | 258.4471 | 268.0401 | | 5.06% | 6.66% | 2.23% | 6.03% | 0.985 | -1.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024309 | 0.004264 | 0.099571 | 105.751 | 105.5683 | 209.9616 | 214.7696 | | -16.34% | -16.48% | -16.95% | -15.04% | 1.002 | 0.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024186 | 0.004264 | 0.099067 | 111.9197 | 109.6901 | 219.5693 | 224.5973 | | -11.46% | -13.22% | -13.15% | -11.16% | 1.020 | 2.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024044 | 0.004264 | 0.098486 | 112.4226 | 112.9561 | 222.4192 | 227.5125 | | -11.06% | -10.64% | -12.02% | -10.00% | 0.995 | -0.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0023883 | 0.004264 | 0.097825 | 112.563 | 114.6884 | 223.4514 | 228.5683 | | -10.95% | -9.27% | -11.61% | -9.59% | 0.981 | -1.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0023047 | 0.004264 | 0.0944 | 113.5098 | 116.635 | 223.8621 | 228.9883 | | -10.20% | -7.73% | -11.45% | -9.42% | 0.973 | -2.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0022182 | 0.004264 | 0.090857 | 114.7807 | 117.012 | 223.7734 | 228.8977 | | -9.19% | -7.43% | -11.48% | -9.46% | 0.981 | -1.91% |

Table B.48. $^{99m}$Tc TRODAT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 114-126 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 126.4 | 63.2 | 189.6 | | | | | 114-126 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025919 | 0.003843 | 0.10617 | 123.0246 | 60.3577 | 181.258 | 187.9319 | | -2.67% | -4.50% | -4.40% | -0.88% | 2.038 | 1.91% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025788 | 0.003843 | 0.10563 | 128.4413 | 63.8925 | 189.5985 | 196.5816 | | 1.61% | 1.10% | 0.00% | 3.68% | 2.010 | 0.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025637 | 0.003843 | 0.10501 | 128.791 | 66.8838 | 192.1715 | 199.2556 | | 1.89% | 5.83% | 1.36% | 5.09% | 1.926 | -3.72% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025465 | 0.003843 | 0.1043 | 128.4585 | 68.9017 | 192.9749 | 200.0933 | | 1.63% | 9.02% | 1.78% | 5.53% | 1.864 | -6.78% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024573 | 0.003843 | 0.10065 | 128.3028 | 71.8116 | 193.2599 | 200.3948 | | 1.51% | 13.63% | 1.93% | 5.69% | 1.787 | -10.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0023651 | 0.003843 | 0.096874 | 128.9437 | 72.9093 | 193.2381 | 200.3736 | | 2.01% | 15.36% | 1.92% | 5.68% | 1.769 | -11.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025919 | 0.003843 | 0.10617 | 113.5313 | 45.2017 | 156.8771 | 160.4404 | | -10.18% | -28.48% | -17.26% | -15.38% | 2.512 | 25.58% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025788 | 0.003843 | 0.10563 | 118.4389 | 48.062 | 164.1139 | 167.8427 | | -6.30% | -23.95% | -13.44% | -11.48% | 2.464 | 23.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025637 | 0.003843 | 0.10501 | 118.4434 | 50.9631 | 166.3534 | 170.1365 | | -6.29% | -19.36% | -12.26% | -10.27% | 2.324 | 16.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025465 | 0.003843 | 0.1043 | 117.8892 | 52.9865 | 167.0567 | 170.8582 | | -6.73% | -16.16% | -11.89% | -9.88% | 2.225 | 11.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024573 | 0.003843 | 0.10065 | 117.4057 | 55.8947 | 167.316 | 171.1266 | | -7.12% | -11.56% | -11.75% | -9.74% | 2.100 | 5.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0023651 | 0.003843 | 0.096874 | 117.9158 | 56.9304 | 167.3044 | 171.1156 | | -6.71% | -9.92% | -11.76% | -9.75% | 2.071 | 3.56% |

Table B.49. $^{99m}$Tc TRODAT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 114-126 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 126.4 | 25.28 | 151.68 | | | | | 114-126 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0026355 | 0.003576 | 0.10795 | 123.5559 | 23.3933 | 142.9879 | 148.1255 | | -2.25% | -7.46% | -5.73% | -2.34% | 5.282 | 5.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0026222 | 0.003576 | 0.1074 | 128.1041 | 26.0578 | 149.5934 | 154.9787 | | 1.35% | 3.08% | -1.38% | 2.17% | 4.916 | -1.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0026068 | 0.003576 | 0.10677 | 128.1207 | 28.7919 | 151.6351 | 157.1088 | | 1.36% | 13.89% | -0.03% | 3.58% | 4.450 | -11.00% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025893 | 0.003576 | 0.10606 | 127.3838 | 30.942 | 152.1716 | 157.6766 | | 0.78% | 22.40% | 0.32% | 3.95% | 4.117 | -17.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024986 | 0.003576 | 0.10234 | 126.4165 | 34.3706 | 152.2803 | 157.807 | | 0.01% | 35.96% | 0.40% | 4.04% | 3.678 | -26.44% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024048 | 0.003576 | 0.098502 | 126.7029 | 35.8124 | 152.3755 | 157.9125 | | 0.24% | 41.66% | 0.46% | 4.11% | 3.538 | -29.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0026355 | 0.003576 | 0.10795 | 118.2072 | 8.9896 | 123.7161 | 126.4579 | | -6.48% | -64.44% | -18.44% | -16.63% | 13.149 | 162.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0026222 | 0.003576 | 0.1074 | 122.3606 | 11.0954 | 129.4488 | 132.3232 | | -3.20% | -56.11% | -14.66% | -12.76% | 11.028 | 120.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0026068 | 0.003576 | 0.10677 | 122.0673 | 13.7813 | 131.2287 | 134.1506 | | -3.43% | -45.49% | -13.48% | -11.56% | 8.857 | 77.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025893 | 0.003576 | 0.10606 | 121.0997 | 15.9817 | 131.7023 | 134.6412 | | -4.19% | -36.78% | -13.17% | -11.23% | 7.577 | 51.55% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024986 | 0.003576 | 0.10234 | 119.7535 | 19.4957 | 131.8113 | 134.7622 | | -5.26% | -22.88% | -13.10% | -11.15% | 6.143 | 22.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024048 | 0.003576 | 0.098502 | 119.8643 | 20.9203 | 131.9031 | 134.8597 | | -5.17% | -17.25% | -13.04% | -11.09% | 5.730 | 14.59% |

Table B.50. $^{99m}$Tc TRODAT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 121-126 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 126.4 | 126.4 | 252.8 | | | | | 121-126 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0036038 | 0.004847 | 0.14761 | 121.009 | 117.4222 | 236.3864 | 245.1606 | | -4.27% | -7.10% | -6.49% | -3.02% | 1.031 | 3.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0035856 | 0.004847 | 0.14686 | 127.1651 | 122.9043 | 246.9302 | 256.0956 | | 0.61% | -2.77% | -2.32% | 1.30% | 1.035 | 3.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0035645 | 0.004847 | 0.146 | 128.3139 | 126.0127 | 250.0377 | 259.3186 | | 1.51% | -0.31% | -1.09% | 2.58% | 1.018 | 1.83% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0035406 | 0.004847 | 0.14502 | 128.7564 | 127.6435 | 251.1871 | 260.5108 | | 1.86% | 0.98% | -0.64% | 3.05% | 1.009 | 0.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0034166 | 0.004847 | 0.13995 | 131.1375 | 128.3484 | 251.0173 | 260.3345 | | 3.75% | 1.54% | -0.71% | 2.98% | 1.022 | 2.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0032884 | 0.004847 | 0.13469 | 132.5675 | 128.9327 | 251.3074 | 260.6354 | | 4.88% | 2.00% | -0.59% | 3.10% | 1.028 | 2.82% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0036038 | 0.004847 | 0.14761 | 105.1495 | 101.2334 | 204.6106 | 209.296 | | -16.81% | -19.91% | -19.06% | -17.21% | 1.039 | 3.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0035856 | 0.004847 | 0.14686 | 110.5663 | 105.9156 | 213.7574 | 218.6522 | | -12.53% | -16.21% | -15.44% | -13.51% | 1.044 | 4.39% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0035645 | 0.004847 | 0.146 | 111.3396 | 108.8437 | 216.4594 | 221.4161 | | -11.91% | -13.89% | -14.38% | -12.41% | 1.023 | 2.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0035406 | 0.004847 | 0.14502 | 111.5933 | 110.3971 | 217.4615 | 222.4412 | | -11.71% | -12.66% | -13.98% | -12.01% | 1.011 | 1.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0034166 | 0.004847 | 0.13995 | 113.8699 | 110.8404 | 217.3282 | 222.3049 | | -9.91% | -12.31% | -14.03% | -12.06% | 1.027 | 2.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0032884 | 0.004847 | 0.13469 | 115.231 | 111.2657 | 217.591 | 222.5736 | | -8.84% | -11.97% | -13.93% | -11.96% | 1.036 | 3.56% |

Table B.51. $^{99m}$Tc TRODAT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 121-126 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 126.4 | 63.2 | 189.6 | | | | | 121-126 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037983 | 0.004339 | 0.15558 | 121.1368 | 57.8199 | 176.4159 | 182.9077 | | -4.16% | -8.51% | -6.95% | -3.53% | 2.095 | 4.75% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037791 | 0.004339 | 0.15479 | 126.078 | 61.6881 | 184.3318 | 191.1186 | | -0.25% | -2.39% | -2.78% | 0.80% | 2.044 | 2.19% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037569 | 0.004339 | 0.15388 | 126.617 | 64.3986 | 186.6488 | 193.5265 | | 0.17% | 1.90% | -1.56% | 2.07% | 1.966 | -1.69% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037317 | 0.004339 | 0.15285 | 126.3883 | 66.1928 | 187.4416 | 194.3527 | | -0.01% | 4.74% | -1.14% | 2.51% | 1.909 | -4.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0036011 | 0.004339 | 0.1475 | 127.2687 | 67.7016 | 187.2641 | 194.171 | | 0.69% | 7.12% | -1.23% | 2.41% | 1.880 | -6.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0034659 | 0.004339 | 0.14196 | 128.0684 | 68.5877 | 187.4767 | 194.3925 | | 1.32% | 8.52% | -1.12% | 2.53% | 1.867 | -6.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037983 | 0.004339 | 0.15558 | 111.9736 | 42.9284 | 152.684 | 156.15 | | -11.41% | -32.08% | -19.47% | -17.64% | 2.608 | 30.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037791 | 0.004339 | 0.15479 | 116.3784 | 46.1678 | 159.5514 | 163.1752 | | -7.93% | -26.95% | -15.85% | -13.94% | 2.521 | 26.04% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037569 | 0.004339 | 0.15388 | 116.5984 | 48.7733 | 161.5675 | 165.2402 | | -7.75% | -22.83% | -14.79% | -12.85% | 2.391 | 19.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037317 | 0.004339 | 0.15285 | 116.1726 | 50.5651 | 162.262 | 165.9527 | | -8.09% | -19.99% | -14.42% | -12.47% | 2.297 | 14.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0036011 | 0.004339 | 0.1475 | 116.8687 | 51.9745 | 162.1189 | 165.8076 | | -7.54% | -17.76% | -14.49% | -12.55% | 2.249 | 12.43% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0034659 | 0.004339 | 0.14196 | 117.5585 | 52.7795 | 162.3117 | 166.0054 | | -6.99% | -16.49% | -14.39% | -12.44% | 2.227 | 11.37% |

Table B.52. $^{99m}$Tc TRODAT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 121-126 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 126.4 | 25.28 | 151.68 | | | | | 121-126 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037448 | 0.004045 | 0.15339 | 121.2426 | 22.0873 | 138.9688 | 143.957 | | -4.08% | -12.63% | -8.38% | -5.09% | 5.489 | 9.78% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037258 | 0.004045 | 0.15261 | 125.4622 | 24.9974 | 145.2992 | 150.5271 | | -0.74% | -1.12% | -4.21% | -0.76% | 5.019 | 0.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.003704 | 0.004045 | 0.15172 | 125.6449 | 27.479 | 147.1754 | 152.4842 | | -0.60% | 8.70% | -2.97% | 0.53% | 4.572 | -8.55% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0036791 | 0.004045 | 0.1507 | 125.0281 | 29.3821 | 147.7494 | 153.0895 | | -1.09% | 16.23% | -2.59% | 0.93% | 4.255 | -14.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0035503 | 0.004045 | 0.14542 | 125.0803 | 31.419 | 147.5087 | 152.8507 | | -1.04% | 24.28% | -2.75% | 0.77% | 3.981 | -20.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0034171 | 0.004045 | 0.13996 | 125.5566 | 32.5575 | 147.7424 | 153.0983 | | -0.67% | 28.79% | -2.60% | 0.94% | 3.856 | -22.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037448 | 0.004045 | 0.15339 | 116.0932 | 7.9704 | 120.2359 | 122.8978 | | -8.15% | -68.47% | -20.73% | -18.98% | 14.566 | 191.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037258 | 0.004045 | 0.15261 | 119.8974 | 10.353 | 125.7297 | 128.5199 | | -5.14% | -59.05% | -17.11% | -15.27% | 11.581 | 131.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.003704 | 0.004045 | 0.15172 | 119.7939 | 12.7737 | 127.3649 | 130.1987 | | -5.23% | -49.47% | -16.03% | -14.16% | 9.378 | 87.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0036791 | 0.004045 | 0.1507 | 118.9734 | 14.7179 | 127.8714 | 130.7221 | | -5.88% | -41.78% | -15.70% | -13.82% | 8.084 | 61.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0035503 | 0.004045 | 0.14542 | 118.7873 | 16.7448 | 127.6729 | 130.5248 | | -6.02% | -33.76% | -15.83% | -13.95% | 7.094 | 41.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0034171 | 0.004045 | 0.13996 | 119.1217 | 17.842 | 127.8845 | 130.7441 | | -5.76% | -29.42% | -15.69% | -13.80% | 6.676 | 33.53% |

Table B.53. $^{99m}$Tc TRODAT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 123-128 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 126.4 | 126.4 | 252.8 | | | | | 123-128 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.004918 | 0.004983 | 0.20144 | 112.2099 | 129.3195 | 239.8634 | 248.7636 | | -11.23% | 2.31% | -5.12% | -1.60% | 0.8677 | -13.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0048931 | 0.004983 | 0.20042 | 117.9607 | 135.8845 | 251.3698 | 260.697 | | -6.68% | 7.50% | -0.57% | 3.12% | 0.8681 | -13.19% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0048644 | 0.004983 | 0.19925 | 119.374 | 139.2292 | 255.065 | 264.5287 | | -5.56% | 10.15% | 0.90% | 4.64% | 0.8574 | -14.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0048318 | 0.004983 | 0.19791 | 119.595 | 141.5103 | 256.6621 | 266.1843 | | -5.38% | 11.95% | 1.53% | 5.29% | 0.8451 | -15.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0046626 | 0.004983 | 0.19098 | 122.1236 | 144.4359 | 259.2899 | 268.9096 | | -3.38% | 14.27% | 2.57% | 6.37% | 0.8455 | -15.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0044876 | 0.004983 | 0.18381 | 124.9645 | 144.465 | 260.1057 | 269.7569 | | -1.14% | 14.29% | 2.89% | 6.71% | 0.865 | -13.50% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.004918 | 0.004983 | 0.20144 | 95.1927 | 113.8771 | 207.6252 | 212.378 | | -24.69% | -9.91% | -17.87% | -15.99% | 0.8359 | -16.41% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0048931 | 0.004983 | 0.20042 | 100.0941 | 119.6635 | 217.61 | 222.5914 | | -20.81% | -5.33% | -13.92% | -11.95% | 0.8365 | -16.35% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0048644 | 0.004983 | 0.19925 | 101.1047 | 122.7903 | 220.8234 | 225.878 | | -20.01% | -2.86% | -12.65% | -10.65% | 0.8234 | -17.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0048318 | 0.004983 | 0.19791 | 101.065 | 125.0096 | 222.2143 | 227.3003 | | -20.04% | -1.10% | -12.10% | -10.09% | 0.8085 | -19.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0046626 | 0.004983 | 0.19098 | 103.2335 | 127.6267 | 224.5192 | 229.658 | | -18.33% | 0.97% | -11.19% | -9.15% | 0.8089 | -19.11% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0044876 | 0.004983 | 0.18381 | 106.0533 | 127.3478 | 225.2428 | 230.3988 | | -16.10% | 0.75% | -10.90% | -8.86% | 0.8328 | -16.72% |

Table B.54. $^{99m}$Tc TRODAT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 123-128 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 126.4 | 63.2 | 189.6 | | | | | 123-128 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0042104 | 0.004278 | 0.17246 | 112.6936 | 61.8616 | 172.3912 | 178.7529 | | -10.84% | -2.12% | -9.08% | -5.72% | 1.822 | -8.91% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0041891 | 0.004278 | 0.17159 | 116.8185 | 66.4623 | 180.4283 | 187.0909 | | -7.58% | 5.16% | -4.84% | -1.32% | 1.758 | -12.12% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0041645 | 0.004278 | 0.17058 | 117.5502 | 68.9727 | 182.8445 | 189.6 | | -7.00% | 9.13% | -3.56% | 0.00% | 1.704 | -14.78% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0041366 | 0.004278 | 0.16943 | 117.2186 | 70.9621 | 183.7536 | 190.5462 | | -7.26% | 12.28% | -3.08% | 0.50% | 1.652 | -17.41% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0039918 | 0.004278 | 0.1635 | 118.1725 | 73.4321 | 184.9008 | 191.7389 | | -6.51% | 16.19% | -2.48% | 1.13% | 1.609 | -19.54% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0038419 | 0.004278 | 0.15737 | 119.7367 | 73.8036 | 185.3014 | 192.1535 | | -5.27% | 16.78% | -2.27% | 1.35% | 1.622 | -18.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0042104 | 0.004278 | 0.17246 | 103.2513 | 47.8447 | 149.2107 | 152.6075 | | -18.31% | -24.30% | -21.30% | -19.51% | 2.158 | 7.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0041891 | 0.004278 | 0.17159 | 106.7774 | 51.8908 | 156.1857 | 159.7436 | | -15.52% | -17.89% | -17.62% | -15.75% | 2.058 | 2.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0041645 | 0.004278 | 0.17058 | 107.2118 | 54.2758 | 158.288 | 161.8958 | | -15.18% | -14.12% | -16.51% | -14.61% | 1.975 | -1.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0041366 | 0.004278 | 0.16943 | 106.6615 | 56.2714 | 159.082 | 162.7098 | | -15.62% | -10.96% | -16.10% | -14.18% | 1.895 | -5.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0039918 | 0.004278 | 0.1635 | 107.3163 | 58.6233 | 160.0922 | 163.7447 | | -15.10% | -7.24% | -15.56% | -13.64% | 1.831 | -8.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0038419 | 0.004278 | 0.15737 | 108.8188 | 58.8368 | 160.4503 | 164.1106 | | -13.91% | -6.90% | -15.37% | -13.44% | 1.850 | -7.52% |

Table B.55. $^{99m}$Tc TRODAT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission Data Only; Energy Windows Used: 123-128 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC | | | 126.4 | 25.28 | 151.68 | | | | | 123-128 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0036083 | 0.003891 | 0.1478 | 113.0128 | 21.418 | 130.1735 | 134.851 | | -10.59% | -15.28% | -14.18% | -11.10% | 5.277 | 5.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.00359 | 0.003891 | 0.14705 | 116.1713 | 24.85 | 136.0223 | 140.9258 | | -8.09% | -1.70% | -10.32% | -7.09% | 4.675 | -6.50% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.003569 | 0.003891 | 0.14619 | 116.5041 | 26.8705 | 137.5274 | 142.4954 | | -7.83% | 6.29% | -9.33% | -6.06% | 4.336 | -13.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.003545 | 0.003891 | 0.14521 | 115.8585 | 28.6934 | 137.9892 | 142.9838 | | -8.34% | 13.50% | -9.03% | -5.73% | 4.038 | -19.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0034209 | 0.003891 | 0.14012 | 115.9431 | 30.9426 | 138.2309 | 143.2453 | | -8.27% | 22.40% | -8.87% | -5.56% | 3.747 | -25.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0032925 | 0.003891 | 0.13486 | 116.8147 | 31.5656 | 138.4035 | 143.4265 | | -7.58% | 24.86% | -8.75% | -5.44% | 3.701 | -25.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0036083 | 0.003891 | 0.1478 | 108.1115 | 8.2522 | 112.632 | 115.1283 | | -14.47% | -67.36% | -25.74% | -24.10% | 13.101 | 162.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.00359 | 0.003891 | 0.14705 | 110.8206 | 11.2628 | 117.7099 | 120.3273 | | -12.33% | -55.45% | -22.40% | -20.67% | 9.840 | 96.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.003569 | 0.003891 | 0.14619 | 110.9181 | 13.2121 | 119.0217 | 121.6738 | | -12.25% | -47.74% | -21.53% | -19.78% | 8.395 | 67.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.003545 | 0.003891 | 0.14521 | 110.0776 | 15.0801 | 119.4288 | 122.0952 | | -12.91% | -40.35% | -21.26% | -19.50% | 7.300 | 45.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0034209 | 0.003891 | 0.14012 | 109.8959 | 17.3142 | 119.6503 | 122.3276 | | -13.06% | -31.51% | -21.12% | -19.35% | 6.347 | 26.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0032925 | 0.003891 | 0.13486 | 110.6786 | 17.8582 | 119.8085 | 122.4906 | | -12.44% | -29.36% | -21.01% | -19.24% | 6.198 | 23.95% |

Table B.56.$^{123}$I β-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 100 | 100 | 200 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11025 | 0.072823 | 4.5158 | 97.4762 | 97.7439 | 189.2031 | 195.8155 | | -2.52% | -2.26% | -5.40% | -2.09% | 0.997 | -0.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10969 | 0.072823 | 4.4929 | 100.9866 | 106.6619 | 197.7173 | 204.627 | | 0.99% | 6.66% | -1.14% | 2.31% | 0.947 | -5.32% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10905 | 0.072823 | 4.4665 | 104.731 | 110.5821 | 201.6383 | 208.685 | | 4.73% | 10.58% | 0.82% | 4.34% | 0.947 | -5.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10831 | 0.072823 | 4.4366 | 107.3276 | 112.4934 | 202.7567 | 209.8425 | | 7.33% | 12.49% | 1.38% | 4.92% | 0.954 | -4.59% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10452 | 0.072823 | 4.2812 | 117.1366 | 120.0744 | 205.0283 | 212.1937 | | 17.14% | 20.07% | 2.51% | 6.10% | 0.976 | -2.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1006 | 0.072823 | 4.1205 | 122.0872 | 136.5223 | 211.8402 | 219.242 | | 22.09% | 36.52% | 5.92% | 9.62% | 0.894 | -10.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11025 | 0.072823 | 4.5158 | 86.0357 | 86.3047 | 167.022 | 170.8467 | | -13.96% | -13.70% | -16.49% | -14.58% | 0.997 | -0.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10969 | 0.072823 | 4.4929 | 88.5953 | 94.7462 | 174.5575 | 178.5546 | | -11.40% | -5.25% | -12.72% | -10.72% | 0.935 | -6.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10905 | 0.072823 | 4.4665 | 91.9005 | 98.2352 | 178.0319 | 182.1085 | | -8.10% | -1.76% | -10.98% | -8.95% | 0.936 | -6.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10831 | 0.072823 | 4.4366 | 94.2595 | 99.8942 | 179.0377 | 183.1373 | | -5.74% | -0.11% | -10.48% | -8.43% | 0.944 | -5.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10452 | 0.072823 | 4.2812 | 103.2372 | 106.4922 | 181.1243 | 185.2719 | | 3.24% | 6.49% | -9.44% | -7.36% | 0.969 | -3.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1006 | 0.072823 | 4.1205 | 106.5361 | 122.4382 | 187.2329 | 191.5194 | | 6.54% | 22.44% | -6.38% | -4.24% | 0.870 | -12.99% |

Table B.57.$^{123}$I β-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 100 | 50 | 150 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11023 | 0.073198 | 4.515 | 96.4273 | 49.061 | 138.4267 | 143.231 | | -3.57% | -1.88% | -7.72% | -4.51% | 1.965 | -1.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10967 | 0.073198 | 4.4922 | 98.6111 | 56.9512 | 144.6842 | 149.7173 | | -1.39% | 13.90% | -3.54% | -0.19% | 1.732 | -13.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10903 | 0.073198 | 4.4658 | 101.7349 | 60.6848 | 148.0132 | 153.1647 | | 1.73% | 21.37% | -1.32% | 2.11% | 1.676 | -16.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1083 | 0.073198 | 4.4359 | 104.2104 | 62.2691 | 148.7317 | 153.9086 | | 4.21% | 24.54% | -0.85% | 2.61% | 1.674 | -16.32% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10451 | 0.073198 | 4.2805 | 113.463 | 70.1655 | 151.2172 | 156.4837 | | 13.46% | 40.33% | 0.81% | 4.32% | 1.617 | -19.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10058 | 0.073198 | 4.1199 | 117.9275 | 86.9873 | 158.1593 | 163.6797 | | 17.93% | 73.97% | 5.44% | 9.12% | 1.356 | -32.22% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11023 | 0.073198 | 4.515 | 89.8296 | 38.6067 | 122.1861 | 124.9645 | | -10.17% | -22.79% | -18.54% | -16.69% | 2.327 | 16.34% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10967 | 0.073198 | 4.4922 | 91.1849 | 46.1702 | 127.7284 | 130.6397 | | -8.82% | -7.66% | -14.85% | -12.91% | 1.975 | -1.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10903 | 0.073198 | 4.4658 | 93.8959 | 49.538 | 130.6797 | 133.6598 | | -6.10% | -0.92% | -12.88% | -10.89% | 1.895 | -5.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1083 | 0.073198 | 4.4359 | 96.1664 | 50.8889 | 131.3321 | 134.3272 | | -3.83% | 1.78% | -12.45% | -10.45% | 1.890 | -5.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10451 | 0.073198 | 4.2805 | 104.5614 | 57.852 | 133.6082 | 136.657 | | 4.56% | 15.70% | -10.93% | -8.90% | 1.807 | -9.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10058 | 0.073198 | 4.1199 | 107.3363 | 74.2181 | 139.8342 | 143.0322 | | 7.34% | 48.44% | -6.78% | -4.65% | 1.446 | -27.69% |

Table B.58.$^{123}$I β-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 100 | 20 | 120 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11029 | 0.073357 | 4.5175 | 95.7846 | 19.8386 | 106.4539 | 110.0694 | | -4.22% | -0.81% | -11.29% | -8.26% | 4.828 | -3.44% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10973 | 0.073357 | 4.4947 | 97.1704 | 27.1046 | 111.3131 | 115.1231 | | -2.83% | 35.52% | -7.24% | -4.06% | 3.585 | -28.30% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10909 | 0.073357 | 4.4683 | 99.9336 | 30.7093 | 114.221 | 118.1404 | | -0.07% | 53.55% | -4.82% | -1.55% | 3.254 | -34.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10836 | 0.073357 | 4.4383 | 102.3647 | 32.0652 | 114.6071 | 118.5423 | | 2.36% | 60.33% | -4.49% | -1.21% | 3.192 | -36.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10456 | 0.073357 | 4.2829 | 111.3355 | 40.0815 | 116.7118 | 120.7341 | | 11.34% | 100.41% | -2.74% | 0.61% | 2.778 | -44.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10064 | 0.073357 | 4.1222 | 115.4869 | 57.1184 | 123.7668 | 128.0634 | | 15.49% | 185.59% | 3.14% | 6.72% | 2.022 | -59.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11029 | 0.073357 | 4.5175 | 92.0942 | 9.977 | 93.9386 | 96.0286 | | -7.91% | -50.12% | -21.72% | -19.98% | 9.231 | 84.61% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10973 | 0.073357 | 4.4947 | 92.7261 | 17.0065 | 98.2495 | 100.4527 | | -7.27% | -14.97% | -18.13% | -16.29% | 5.452 | 9.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10909 | 0.073357 | 4.4683 | 95.0939 | 20.2839 | 100.8304 | 103.0971 | | -4.91% | 1.42% | -15.97% | -14.09% | 4.688 | -6.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10836 | 0.073357 | 4.4383 | 97.3422 | 21.4152 | 101.1895 | 103.4658 | | -2.66% | 7.08% | -15.68% | -13.78% | 4.545 | -9.09% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10456 | 0.073357 | 4.2829 | 105.4457 | 28.5228 | 103.1318 | 105.4604 | | 5.45% | 42.61% | -14.06% | -12.12% | 3.697 | -26.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10064 | 0.073357 | 4.1222 | 107.888 | 45.131 | 109.4602 | 111.9499 | | 7.89% | 125.66% | -8.78% | -6.71% | 2.391 | -52.19% |

Table B.59.$^{123}$I FP-CIT, 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:130-142 keV,142-175 keV,175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 40 | 80 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024394 | 0.015857 | 0.9992 | 39.5785 | 39.2449 | 77.5711 | 80.2821 | | -1.05% | -1.89% | -3.04% | 0.35% | 1.009 | 0.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024271 | 0.015857 | 0.99414 | 41.4114 | 42.0309 | 81.2897 | 84.1306 | | 3.53% | 5.08% | 1.61% | 5.16% | 0.985 | -1.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024129 | 0.015857 | 0.9883 | 42.5556 | 43.1279 | 82.5988 | 85.4855 | | 6.39% | 7.82% | 3.25% | 6.86% | 0.987 | -1.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023967 | 0.015857 | 0.98167 | 43.1291 | 43.8603 | 82.9773 | 85.8773 | | 7.82% | 9.65% | 3.72% | 7.35% | 0.983 | -1.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023128 | 0.015857 | 0.9473 | 45.4047 | 45.7254 | 83.5737 | 86.4946 | | 13.51% | 14.31% | 4.47% | 8.12% | 0.993 | -0.70% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022259 | 0.015857 | 0.91175 | 46.3993 | 49.5162 | 84.9959 | 87.9661 | | 16.00% | 23.79% | 6.24% | 9.96% | 0.937 | -6.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024394 | 0.015857 | 0.9992 | 34.9758 | 34.61 | 68.479 | 70.0472 | | -12.56% | -13.48% | -14.40% | -12.44% | 1.011 | 1.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024271 | 0.015857 | 0.99414 | 36.5005 | 37.1725 | 71.7689 | 73.4124 | | -8.75% | -7.07% | -10.29% | -8.23% | 0.982 | -1.81% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024129 | 0.015857 | 0.9883 | 37.5211 | 38.1385 | 72.9289 | 74.5989 | | -6.20% | -4.65% | -8.84% | -6.75% | 0.984 | -1.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023967 | 0.015857 | 0.98167 | 38.0115 | 38.8104 | 73.2672 | 74.945 | | -4.97% | -2.97% | -8.42% | -6.32% | 0.979 | -2.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023128 | 0.015857 | 0.9473 | 40.0832 | 40.4474 | 73.8129 | 75.5032 | | 0.21% | 1.12% | -7.73% | -5.62% | 0.991 | -0.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022259 | 0.015857 | 0.91175 | 40.6993 | 44.1367 | 75.0901 | 76.8094 | | 1.75% | 10.34% | -6.14% | -3.99% | 0.922 | -7.79% |

Table B.60.$^{123}$I FP-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:130-142 keV,142-175 keV,175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 20 | 60 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02438 | 0.016012 | 0.9986 | 39.1585 | 19.7756 | 57.4525 | 59.4462 | | -2.10% | -1.12% | -4.25% | -0.92% | 1.980 | -0.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024256 | 0.016012 | 0.99354 | 40.4648 | 22.1483 | 60.2574 | 62.3516 | | 1.16% | 10.74% | 0.43% | 3.92% | 1.827 | -8.65% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024114 | 0.016012 | 0.98771 | 41.3676 | 23.1675 | 61.2671 | 63.3972 | | 3.42% | 15.84% | 2.11% | 5.66% | 1.786 | -10.72% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023952 | 0.016012 | 0.98109 | 41.9007 | 23.7636 | 61.5584 | 63.6992 | | 4.75% | 18.82% | 2.60% | 6.17% | 1.763 | -11.84% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023114 | 0.016012 | 0.94674 | 43.9835 | 25.6965 | 62.2358 | 64.4013 | | 9.96% | 28.48% | 3.73% | 7.34% | 1.712 | -14.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022246 | 0.016012 | 0.9112 | 44.781 | 29.6472 | 63.7324 | 65.9542 | | 11.95% | 48.24% | 6.22% | 9.92% | 1.510 | -24.48% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02438 | 0.016012 | 0.9986 | 36.4928 | 15.5341 | 50.7135 | 51.8665 | | -8.77% | -22.33% | -15.48% | -13.56% | 2.349 | 17.46% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024256 | 0.016012 | 0.99354 | 37.5395 | 17.7431 | 53.1959 | 54.4073 | | -6.15% | -11.28% | -11.34% | -9.32% | 2.116 | 5.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024114 | 0.016012 | 0.98771 | 38.3294 | 18.657 | 54.091 | 55.3232 | | -4.18% | -6.72% | -9.85% | -7.79% | 2.054 | 2.72% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023952 | 0.016012 | 0.98109 | 38.7929 | 19.1994 | 54.3526 | 55.591 | | -3.02% | -4.00% | -9.41% | -7.35% | 2.021 | 1.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023114 | 0.016012 | 0.94674 | 40.667 | 20.9216 | 54.9703 | 56.2235 | | 1.67% | 4.61% | -8.38% | -6.29% | 1.944 | -2.81% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022246 | 0.016012 | 0.9112 | 41.0699 | 24.7897 | 56.3144 | 57.6008 | | 2.67% | 23.95% | -6.14% | -4.00% | 1.657 | -17.16% |

Table B.61.$^{123}$I FP-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:130-142 keV,142-175 keV,175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 8 | 48 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02439 | 0.01609 | 0.99901 | 38.9039 | 8.0897 | 44.9478 | 46.4745 | | -2.74% | 1.12% | -6.36% | -3.18% | 4.8091 | -3.82% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024266 | 0.01609 | 0.99395 | 39.8922 | 10.2141 | 47.1661 | 48.7769 | | -0.27% | 27.68% | -1.74% | 1.62% | 3.9056 | -21.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024124 | 0.01609 | 0.98812 | 40.6463 | 11.1867 | 48.0251 | 49.6683 | | 1.62% | 39.83% | 0.05% | 3.48% | 3.6334 | -27.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023962 | 0.01609 | 0.98149 | 41.1486 | 11.7006 | 48.1939 | 49.8445 | | 2.87% | 46.26% | 0.40% | 3.84% | 3.5168 | -29.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023123 | 0.01609 | 0.94713 | 43.0718 | 13.715 | 48.8085 | 50.4853 | | 7.68% | 71.44% | 1.68% | 5.18% | 3.1405 | -37.19% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022255 | 0.01609 | 0.91158 | 43.7293 | 17.7558 | 50.3075 | 52.0465 | | 9.32% | 121.95% | 4.81% | 8.43% | 2.4628 | -50.74% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02439 | 0.01609 | 0.99901 | 37.4009 | 4.0848 | 39.6658 | 40.5484 | | -6.50% | -48.94% | -17.36% | -15.52% | 9.1561 | 83.12% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024266 | 0.01609 | 0.99395 | 38.1588 | 6.0817 | 41.6303 | 42.5618 | | -4.60% | -23.98% | -13.27% | -11.33% | 6.2744 | 127.44% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024124 | 0.01609 | 0.98812 | 38.8067 | 6.9644 | 42.3925 | 43.3428 | | -2.98% | -12.95% | -11.68% | -9.70% | 5.5722 | 57.22% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023962 | 0.01609 | 0.98149 | 39.2477 | 7.4293 | 42.5462 | 43.5008 | | -1.88% | -7.13% | -11.36% | -9.37% | 5.2828 | 28.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023123 | 0.01609 | 0.94713 | 40.9559 | 9.2473 | 43.1094 | 44.0797 | | 2.39% | 15.59% | -10.19% | -8.17% | 4.429 | -11.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022255 | 0.01609 | 0.91158 | 41.2101 | 13.2188 | 44.4571 | 45.464 | | 3.03% | 65.24% | -7.38% | -5.28% | 3.1175 | -37.65% |

Table B.62. $^{123}$I IBZM 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 84 | 168 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022116 | 0.015003 | 0.90587 | 84.2143 | 82.9543 | 165.5116 | 171.296 | | 0.26% | -1.24% | -1.48% | 1.96% | 1.0152 | 1.52% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022004 | 0.015003 | 0.90128 | 88.7436 | 87.7118 | 173.7215 | 179.7928 | | 5.65% | 4.42% | 3.41% | 7.02% | 1.0118 | 1.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021875 | 0.015003 | 0.896 | 90.6944 | 89.3756 | 176.2158 | 182.3744 | | 7.97% | 6.40% | 4.89% | 8.56% | 1.0148 | 1.48% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021728 | 0.015003 | 0.88999 | 91.3186 | 90.8474 | 177.1491 | 183.3402 | | 8.71% | 8.15% | 5.45% | 9.13% | 1.0052 | 0.52% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020967 | 0.015003 | 0.85883 | 93.8762 | 93.3467 | 178.3129 | 184.5448 | | 11.76% | 11.13% | 6.14% | 9.85% | 1.0057 | 0.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02018 | 0.015003 | 0.82659 | 94.7736 | 97.4728 | 179.7271 | 186.0083 | | 12.83% | 16.04% | 6.98% | 10.72% | 0.9723 | -2.77% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022116 | 0.015003 | 0.90587 | 74.4734 | 73.1047 | 146.1143 | 149.4602 | | -11.34% | -12.97% | -13.03% | -11.04% | 1.0187 | 1.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022004 | 0.015003 | 0.90128 | 78.4563 | 77.3381 | 153.3761 | 156.8883 | | -6.60% | -7.93% | -8.70% | -6.61% | 1.0145 | 1.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021875 | 0.015003 | 0.896 | 80.2186 | 78.7805 | 155.5867 | 159.1495 | | -4.50% | -6.21% | -7.39% | -5.27% | 1.0183 | 1.83% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021728 | 0.015003 | 0.88999 | 80.6858 | 80.1752 | 156.4159 | 159.9977 | | -3.95% | -4.55% | -6.90% | -4.76% | 1.0064 | 0.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020967 | 0.015003 | 0.85883 | 82.9716 | 82.4169 | 157.4683 | 161.0742 | | -1.22% | -1.88% | -6.27% | -4.12% | 1.0067 | 0.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02018 | 0.015003 | 0.82659 | 83.459 | 86.4498 | 158.739 | 162.374 | | -0.64% | 2.92% | -5.51% | -3.35% | 0.9654 | -3.46% |

Table B.63. $^{123}$I IBZM 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 42 | 126 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022306 | 0.014946 | 0.91366 | 83.2942 | 41.9334 | 123.3403 | 127.6202 | | -0.84% | -0.16% | -2.11% | 1.29% | 1.986 | -0.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022193 | 0.014946 | 0.90903 | 86.7051 | 45.8079 | 129.7066 | 134.2116 | | 3.22% | 9.07% | 2.94% | 6.52% | 1.893 | -5.36% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022063 | 0.014946 | 0.9037 | 88.1274 | 47.2993 | 131.6346 | 136.2079 | | 4.91% | 12.62% | 4.47% | 8.10% | 1.863 | -6.84% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021915 | 0.014946 | 0.89764 | 88.6372 | 48.4749 | 132.2923 | 136.8901 | | 5.52% | 15.42% | 4.99% | 8.64% | 1.829 | -8.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021148 | 0.014946 | 0.86621 | 90.6971 | 51.0396 | 133.3536 | 137.9908 | | 7.97% | 21.52% | 5.84% | 9.52% | 1.777 | -11.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020354 | 0.014946 | 0.83369 | 91.0952 | 55.4292 | 134.7171 | 139.4079 | | 8.45% | 31.97% | 6.92% | 10.64% | 1.643 | -17.83% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022306 | 0.014946 | 0.91366 | 77.635 | 32.9166 | 108.8762 | 111.3515 | | -7.58% | -21.63% | -13.59% | -11.63% | 2.359 | 17.93% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022193 | 0.014946 | 0.90903 | 80.6028 | 36.3944 | 114.5082 | 117.114 | | -4.04% | -13.35% | -9.12% | -7.05% | 2.215 | 10.74% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022063 | 0.014946 | 0.9037 | 81.8605 | 37.7199 | 116.2174 | 118.8628 | | -2.55% | -10.19% | -7.76% | -5.66% | 2.170 | 8.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021915 | 0.014946 | 0.89764 | 82.2429 | 38.8357 | 116.8029 | 119.4626 | | -2.09% | -7.53% | -7.30% | -5.19% | 2.118 | 5.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021148 | 0.014946 | 0.86621 | 84.0282 | 41.1907 | 117.7641 | 120.4472 | | 0.03% | -1.93% | -6.54% | -4.41% | 2.040 | 2.00% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020354 | 0.014946 | 0.83369 | 83.9891 | 45.5372 | 118.9915 | 121.7062 | | -0.01% | 8.42% | -5.56% | -3.41% | 1.844 | -7.78% |

Table B.64. $^{123}$I IBZM 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 16.8 | 100.8 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022345 | 0.015075 | 0.91525 | 82.7534 | 17.3346 | 97.1672 | 100.4684 | | -1.48% | 3.18% | -3.60% | -0.33% | 4.7739 | -4.52% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022232 | 0.015075 | 0.91061 | 85.4964 | 20.6839 | 102.3807 | 105.872 | | 1.78% | 23.12% | 1.57% | 5.03% | 4.1335 | -17.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022101 | 0.015075 | 0.90527 | 86.607 | 22.0758 | 103.9175 | 107.4659 | | 3.10% | 31.40% | 3.09% | 6.61% | 3.9232 | -21.54% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021953 | 0.015075 | 0.8992 | 87.0563 | 23.0777 | 104.4016 | 107.9705 | | 3.64% | 37.37% | 3.57% | 7.11% | 3.7723 | -24.55% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021184 | 0.015075 | 0.86771 | 88.8418 | 25.7303 | 105.3742 | 108.9851 | | 5.76% | 53.16% | 4.54% | 8.12% | 3.4528 | -30.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020389 | 0.015075 | 0.83514 | 88.9924 | 30.275 | 106.813 | 110.4892 | | 5.94% | 80.21% | 5.97% | 9.61% | 2.9395 | -41.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022345 | 0.015075 | 0.91525 | 79.542 | 8.8157 | 85.7519 | 87.6604 | | -5.31% | -47.53% | -14.93% | -13.04% | 9.0228 | 80.46% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022232 | 0.015075 | 0.91061 | 81.9034 | 11.8444 | 90.3656 | 92.3845 | | -2.50% | -29.50% | -10.35% | -8.35% | 6.9149 | 38.30% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022101 | 0.015075 | 0.90527 | 82.8635 | 13.1031 | 91.7293 | 93.7813 | | -1.35% | -22.01% | -9.00% | -6.96% | 6.324 | 26.48% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021953 | 0.015075 | 0.8992 | 83.2029 | 14.0545 | 92.162 | 94.226 | | -0.95% | -16.34% | -8.57% | -6.52% | 5.92 | 18.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021184 | 0.015075 | 0.86771 | 84.7078 | 16.5225 | 93.0457 | 95.1346 | | 0.84% | -1.65% | -7.69% | -5.62% | 5.1268 | 2.54% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020389 | 0.015075 | 0.83514 | 84.4055 | 21.0487 | 94.3426 | 96.47 | | 0.48% | 25.29% | -6.41% | -4.30% | 4.01 | -19.80% |

Table B.65.$^{123}$I β-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 100 | 100 | 200 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11492 | 0.068326 | 4.707 | 96.2485 | 96.1746 | 187.8801 | 194.4463 | | -3.75% | -3.83% | -6.06% | -2.78% | 1.001 | 0.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11433 | 0.068326 | 4.6831 | 99.9567 | 104.1517 | 196.5176 | 203.3855 | | -0.04% | 4.15% | -1.74% | 1.69% | 0.960 | -4.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11366 | 0.068326 | 4.6556 | 103.5459 | 107.0138 | 199.435 | 206.4049 | | 3.55% | 7.01% | -0.28% | 3.20% | 0.968 | -3.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1129 | 0.068326 | 4.6244 | 104.8952 | 110.537 | 201.2594 | 208.2928 | | 4.90% | 10.54% | 0.63% | 4.15% | 0.949 | -5.10% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10895 | 0.068326 | 4.4625 | 113.207 | 116.7252 | 201.8372 | 208.891 | | 13.21% | 16.73% | 0.92% | 4.45% | 0.970 | -3.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10486 | 0.068326 | 4.295 | 119.6194 | 129.5257 | 207.8714 | 215.1353 | | 19.62% | 29.53% | 3.94% | 7.57% | 0.924 | -7.65% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11492 | 0.068326 | 4.707 | 84.9793 | 84.8857 | 165.8479 | 169.6457 | | -15.02% | -15.11% | -17.08% | -15.18% | 1.001 | 0.11% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11433 | 0.068326 | 4.6831 | 87.8288 | 92.3787 | 173.49 | 177.4627 | | -12.17% | -7.62% | -13.26% | -11.27% | 0.951 | -4.93% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11366 | 0.068326 | 4.6556 | 91.0877 | 94.8383 | 176.0751 | 180.107 | | -8.91% | -5.16% | -11.96% | -9.95% | 0.960 | -3.95% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1129 | 0.068326 | 4.6244 | 92.0635 | 98.2002 | 177.7039 | 181.773 | | -7.94% | -1.80% | -11.15% | -9.11% | 0.938 | -6.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10895 | 0.068326 | 4.4625 | 99.6844 | 103.5808 | 178.2897 | 182.3723 | | -0.32% | 3.58% | -10.86% | -8.81% | 0.962 | -3.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10486 | 0.068326 | 4.295 | 104.8008 | 115.7322 | 183.6958 | 187.9018 | | 4.80% | 15.73% | -8.15% | -6.05% | 0.906 | -9.45% |

Table B.66. $^{123}$I β-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 100 | 50 | 150 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11478 | 0.068684 | 4.7016 | 95.7447 | 47.2043 | 137.271 | 142.0323 | | -4.26% | -5.59% | -8.49% | -5.31% | 2.0283 | 1.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1142 | 0.068684 | 4.6778 | 98.2271 | 54.0987 | 143.6953 | 148.69 | | -1.77% | 8.20% | -4.20% | -0.87% | 1.8157 | -9.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11353 | 0.068684 | 4.6503 | 101.1937 | 56.7855 | 146.127 | 151.2078 | | 1.19% | 13.57% | -2.58% | 0.81% | 1.782 | -10.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11277 | 0.068684 | 4.6191 | 102.435 | 59.9929 | 147.6314 | 152.7684 | | 2.44% | 19.99% | -1.58% | 1.85% | 1.7075 | -14.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10882 | 0.068684 | 4.4574 | 110.34 | 66.3016 | 148.3222 | 153.4858 | | 10.34% | 32.60% | -1.12% | 2.32% | 1.6642 | -16.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10474 | 0.068684 | 4.2901 | 116.2877 | 79.6144 | 154.639 | 160.0324 | | 16.29% | 59.23% | 3.09% | 6.69% | 1.4606 | -26.97% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11478 | 0.068684 | 4.7016 | 89.337 | 36.8525 | 121.1597 | 123.9131 | | -10.66% | -26.30% | -19.23% | -17.39% | 2.4242 | 21.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1142 | 0.068684 | 4.6778 | 91.0863 | 43.4041 | 126.8481 | 129.7369 | | -8.91% | -13.19% | -15.43% | -13.51% | 2.0986 | 4.93% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11353 | 0.068684 | 4.6503 | 93.7481 | 45.7538 | 129.004 | 131.9429 | | -6.25% | -8.49% | -14.00% | -12.04% | 2.049 | 2.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11277 | 0.068684 | 4.6191 | 94.6466 | 48.8177 | 130.3509 | 133.3227 | | -5.35% | -2.36% | -13.10% | -11.12% | 1.9388 | -3.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10882 | 0.068684 | 4.4574 | 101.8516 | 54.3559 | 131.0358 | 134.0247 | | 1.85% | 8.71% | -12.64% | -10.65% | 1.8738 | -6.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10474 | 0.068684 | 4.2901 | 106.4529 | 67.0608 | 136.6941 | 139.8179 | | 6.45% | 34.12% | -8.87% | -6.79% | 1.5874 | -20.63% |

Table B.67. $^{123}$I β-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 100 | 20 | 120 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1145 | 0.06913 | 4.6897 | 95.4778 | 17.8536 | 105.7442 | 109.3265 | | -4.52% | -10.73% | -11.88% | -8.89% | 5.35 | 6.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11392 | 0.06913 | 4.666 | 97.2293 | 24.1133 | 110.8892 | 114.6733 | | -2.77% | 20.57% | -7.59% | -4.44% | 4.03 | -19.36% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11325 | 0.06913 | 4.6386 | 99.8254 | 26.72 | 112.8537 | 116.7125 | | -0.17% | 33.60% | -5.96% | -2.74% | 3.74 | -25.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11249 | 0.06913 | 4.6075 | 100.9808 | 29.7867 | 114.0965 | 118.0082 | | 0.98% | 48.93% | -4.92% | -1.66% | 3.39 | -32.20% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10855 | 0.06913 | 4.4462 | 108.6208 | 36.333 | 114.7329 | 118.6802 | | 8.62% | 81.67% | -4.39% | -1.10% | 2.99 | -40.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10447 | 0.06913 | 4.2793 | 114.5268 | 49.7428 | 121.2261 | 125.4234 | | 14.53% | 148.71% | 1.02% | 4.52% | 2.30 | -53.95% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1145 | 0.06913 | 4.6897 | 91.9831 | 8.0606 | 93.3067 | 95.3775 | | -8.02% | -59.70% | -22.24% | -20.52% | 11.41 | 128.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11392 | 0.06913 | 4.666 | 93.0754 | 14.0618 | 97.8683 | 100.0563 | | -6.92% | -29.69% | -18.44% | -16.62% | 6.62 | 32.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11325 | 0.06913 | 4.6386 | 95.3796 | 16.3699 | 99.6129 | 101.8443 | | -4.62% | -18.15% | -16.99% | -15.13% | 5.83 | 16.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11249 | 0.06913 | 4.6075 | 96.2061 | 19.305 | 100.7302 | 102.9927 | | -3.79% | -3.48% | -16.06% | -14.17% | 4.98 | -0.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10855 | 0.06913 | 4.4462 | 103.1252 | 25.1019 | 101.3693 | 103.6542 | | 3.13% | 25.51% | -15.53% | -13.62% | 4.11 | -17.83% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10447 | 0.06913 | 4.2793 | 107.6744 | 37.9057 | 107.1869 | 109.6185 | | 7.67% | 89.53% | -10.68% | -8.65% | 2.84 | -43.19% |

Table B.68.$^{123}$I FP-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:130-142 keV,142-175 keV,185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 40 | 80 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025347 | 0.014987 | 1.0382 | 39.0912 | 39.0173 | 77.1663 | 79.8632 | | -2.27% | -2.46% | -3.54% | -0.17% | 1.002 | 0.19% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025218 | 0.014987 | 1.0329 | 40.9168 | 41.6206 | 80.8634 | 83.6895 | | 2.29% | 4.05% | 1.08% | 4.61% | 0.983 | -1.69% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02507 | 0.014987 | 1.0269 | 42.0712 | 42.467 | 81.9826 | 84.8478 | | 5.18% | 6.17% | 2.48% | 6.06% | 0.991 | -0.93% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024902 | 0.014987 | 1.02 | 42.403 | 43.5204 | 82.5993 | 85.4861 | | 6.01% | 8.80% | 3.25% | 6.86% | 0.974 | -2.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02403 | 0.014987 | 0.98428 | 44.3692 | 45.1411 | 82.9094 | 85.8069 | | 10.92% | 12.85% | 3.64% | 7.26% | 0.983 | -1.71% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023128 | 0.014987 | 0.94733 | 45.6587 | 48.2115 | 84.2336 | 87.1773 | | 14.15% | 20.53% | 5.29% | 8.97% | 0.947 | -5.30% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025347 | 0.014987 | 1.0382 | 34.5183 | 34.4347 | 68.1196 | 69.6795 | | -13.70% | -13.91% | -14.85% | -12.90% | 1.002 | 0.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025218 | 0.014987 | 1.0329 | 36.0542 | 36.8176 | 71.3901 | 73.0249 | | -9.86% | -7.96% | -10.76% | -8.72% | 0.979 | -2.07% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02507 | 0.014987 | 1.0269 | 37.1098 | 37.5354 | 72.3816 | 74.0391 | | -7.23% | -6.16% | -9.52% | -7.45% | 0.989 | -1.13% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024902 | 0.014987 | 1.02 | 37.3317 | 38.5455 | 72.9303 | 74.6004 | | -6.67% | -3.64% | -8.84% | -6.75% | 0.969 | -3.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02403 | 0.014987 | 0.98428 | 39.119 | 39.9737 | 73.2225 | 74.8993 | | -2.20% | -0.07% | -8.47% | -6.38% | 0.979 | -2.14% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023128 | 0.014987 | 0.94733 | 40.1004 | 42.9124 | 74.4111 | 76.115 | | 0.25% | 7.28% | -6.99% | -4.86% | 0.934 | -6.55% |

Table B.69.$^{123}$I FP-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:130-142 keV,142-175 keV,185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 20 | 60 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02532 | 0.015095 | 1.0371 | 38.8847 | 19.4262 | 57.1996 | 59.1841 | | -2.79% | -2.87% | -4.67% | -1.36% | 2.002 | 0.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025192 | 0.015095 | 1.0319 | 40.219 | 21.5953 | 59.9794 | 62.0633 | | 0.55% | 7.98% | -0.03% | 3.44% | 1.862 | -6.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025044 | 0.015095 | 1.0258 | 41.1218 | 22.3715 | 60.8452 | 62.9596 | | 2.80% | 11.86% | 1.41% | 4.93% | 1.838 | -8.09% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024876 | 0.015095 | 1.0189 | 41.4004 | 23.3032 | 61.3242 | 63.4566 | | 3.50% | 16.52% | 2.21% | 5.76% | 1.777 | -11.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024005 | 0.015095 | 0.98325 | 43.1752 | 24.9665 | 61.6477 | 63.7925 | | 7.94% | 24.83% | 2.75% | 6.32% | 1.729 | -13.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023104 | 0.015095 | 0.94635 | 44.3461 | 28.107 | 62.9816 | 65.176 | | 10.87% | 40.54% | 4.97% | 8.63% | 1.578 | -21.11% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02532 | 0.015095 | 1.0371 | 36.2568 | 15.2186 | 50.4891 | 51.6368 | | -9.36% | -23.91% | -15.85% | -13.94% | 2.382 | 19.12% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025192 | 0.015095 | 1.0319 | 37.3517 | 17.224 | 52.9488 | 54.1541 | | -6.62% | -13.88% | -11.75% | -9.74% | 2.169 | 8.43% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025044 | 0.015095 | 1.0258 | 38.1659 | 17.898 | 53.716 | 54.939 | | -4.59% | -10.51% | -10.47% | -8.44% | 2.132 | 6.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024876 | 0.015095 | 1.0189 | 38.3468 | 18.7942 | 54.1433 | 55.3769 | | -4.13% | -6.03% | -9.76% | -7.71% | 2.040 | 2.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024005 | 0.015095 | 0.98325 | 39.9402 | 20.2828 | 54.4476 | 55.6888 | | -0.15% | 1.41% | -9.25% | -7.19% | 1.969 | -1.54% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023104 | 0.015095 | 0.94635 | 40.7951 | 23.3034 | 55.6445 | 56.9148 | | 1.99% | 16.52% | -7.26% | -5.14% | 1.751 | -12.47% |

Table B.70.$^{123}$I FP-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:130-142 keV,142-175 keV,185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 8 | 48 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025292 | 0.015179 | 1.0359 | 38.7629 | 7.6736 | 44.7321 | 46.2496 | | -3.09% | -4.08% | -6.81% | -3.65% | 5.051 | 1.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025163 | 0.015179 | 1.0307 | 39.8024 | 9.5834 | 46.9448 | 48.5456 | | -0.49% | 19.79% | -2.20% | 1.14% | 4.153 | -16.93% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025016 | 0.015179 | 1.0246 | 40.5562 | 10.3178 | 47.6586 | 49.2859 | | 1.39% | 28.97% | -0.71% | 2.68% | 3.931 | -21.39% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024848 | 0.015179 | 1.0178 | 40.8062 | 11.1746 | 48.053 | 49.6971 | | 2.02% | 39.68% | 0.11% | 3.54% | 3.652 | -26.97% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023978 | 0.015179 | 0.98214 | 42.4831 | 12.8552 | 48.3691 | 50.0287 | | 6.21% | 60.69% | 0.77% | 4.23% | 3.305 | -33.91% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023078 | 0.015179 | 0.94528 | 43.5793 | 16.0575 | 49.7398 | 51.4553 | | 8.95% | 100.72% | 3.62% | 7.20% | 2.714 | -45.72% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025292 | 0.015179 | 1.0359 | 37.3019 | 3.6908 | 39.4738 | 40.3511 | | -6.75% | -53.87% | -17.76% | -15.94% | 10.107 | 102.13% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025163 | 0.015179 | 1.0307 | 38.132 | 5.4708 | 41.433 | 42.3586 | | -4.67% | -31.62% | -13.68% | -11.75% | 6.970 | 197.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025016 | 0.015179 | 1.0246 | 38.8034 | 6.1185 | 42.066 | 43.0071 | | -2.99% | -23.52% | -12.36% | -10.40% | 6.342 | 134.20% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024848 | 0.015179 | 1.0178 | 38.9631 | 6.9444 | 42.4192 | 43.3701 | | -2.59% | -13.20% | -11.63% | -9.65% | 5.611 | 61.07% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023978 | 0.015179 | 0.98214 | 40.4577 | 8.4593 | 42.7179 | 43.6781 | | 1.14% | 5.74% | -11.00% | -9.00% | 4.783 | -4.35% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023078 | 0.015179 | 0.94528 | 41.2314 | 11.5488 | 43.9486 | 44.9417 | | 3.08% | 44.36% | -8.44% | -6.37% | 3.570 | -28.60% |

Table B.71.$^{123}$I IBZM 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 84 | 168 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023085 | 0.014324 | 0.94557 | 83.1807 | 82.969 | 165.1223 | 170.8931 | | -0.98% | -1.23% | -1.71% | 1.72% | 1.003 | 0.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022968 | 0.014324 | 0.94079 | 87.5497 | 87.6 | 173.2278 | 179.282 | | 4.23% | 4.29% | 3.11% | 6.72% | 0.999 | -0.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022834 | 0.014324 | 0.93527 | 89.5886 | 88.9677 | 175.5181 | 181.6523 | | 6.65% | 5.91% | 4.48% | 8.13% | 1.007 | 0.70% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02268 | 0.014324 | 0.92899 | 90.0195 | 90.6807 | 176.6006 | 182.7726 | | 7.17% | 7.95% | 5.12% | 8.79% | 0.993 | -0.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021886 | 0.014324 | 0.89647 | 92.3016 | 93.007 | 177.5834 | 183.7897 | | 9.88% | 10.72% | 5.70% | 9.40% | 0.992 | -0.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021065 | 0.014324 | 0.86282 | 93.4606 | 96.4768 | 178.905 | 185.1574 | | 11.26% | 14.85% | 6.49% | 10.21% | 0.969 | -3.13% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023085 | 0.014324 | 0.94557 | 73.4543 | 73.2222 | 145.7687 | 149.1067 | | -12.55% | -12.83% | -13.23% | -11.25% | 1.003 | 0.32% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022968 | 0.014324 | 0.94079 | 77.2919 | 77.3473 | 152.939 | 156.4412 | | -7.99% | -7.92% | -8.96% | -6.88% | 0.999 | -0.07% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022834 | 0.014324 | 0.93527 | 79.1697 | 78.4894 | 154.9686 | 158.5173 | | -5.75% | -6.56% | -7.76% | -5.64% | 1.009 | 0.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02268 | 0.014324 | 0.92899 | 79.4238 | 80.1397 | 155.9299 | 159.5006 | | -5.45% | -4.60% | -7.18% | -5.06% | 0.991 | -0.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021886 | 0.014324 | 0.89647 | 81.4525 | 82.2388 | 156.822 | 160.4131 | | -3.03% | -2.10% | -6.65% | -4.52% | 0.990 | -0.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021065 | 0.014324 | 0.86282 | 82.2661 | 85.5889 | 158.0104 | 161.6287 | | -2.06% | 1.89% | -5.95% | -3.79% | 0.961 | -3.88% |

Table B.72.$^{123}$I IBZM 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 42 | 126 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023308 | 0.014146 | 0.9547 | 82.6982 | 41.6862 | 123.0399 | 127.3095 | | -1.55% | -0.75% | -2.35% | 1.04% | 1.984 | -0.81% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02319 | 0.014146 | 0.94986 | 86.0204 | 45.3872 | 129.2637 | 133.7532 | | 2.41% | 8.06% | 2.59% | 6.15% | 1.895 | -5.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023054 | 0.014146 | 0.94429 | 87.5114 | 46.5921 | 130.9959 | 135.5463 | | 4.18% | 10.93% | 3.97% | 7.58% | 1.878 | -6.09% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022899 | 0.014146 | 0.93796 | 87.8075 | 48.0329 | 131.8122 | 136.3932 | | 4.53% | 14.36% | 4.61% | 8.25% | 1.828 | -8.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022098 | 0.014146 | 0.90512 | 89.5735 | 50.366 | 132.6748 | 137.2883 | | 6.64% | 19.92% | 5.30% | 8.96% | 1.778 | -11.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021268 | 0.014146 | 0.87114 | 90.286 | 54.0157 | 133.9078 | 138.5692 | | 7.48% | 28.61% | 6.28% | 9.98% | 1.671 | -16.43% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023308 | 0.014146 | 0.9547 | 77.0717 | 32.7339 | 108.6096 | 111.0789 | | -8.25% | -22.06% | -13.80% | -11.84% | 2.354 | 17.72% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02319 | 0.014146 | 0.94986 | 79.9692 | 36.0501 | 114.116 | 116.7128 | | -4.80% | -14.17% | -9.43% | -7.37% | 2.218 | 10.91% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023054 | 0.014146 | 0.94429 | 81.3231 | 37.0862 | 115.6513 | 118.2835 | | -3.19% | -11.70% | -8.21% | -6.12% | 2.193 | 9.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022899 | 0.014146 | 0.93796 | 81.47 | 38.4828 | 116.3773 | 119.0273 | | -3.01% | -8.37% | -7.64% | -5.53% | 2.117 | 5.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022098 | 0.014146 | 0.90512 | 82.9857 | 40.6392 | 117.1624 | 119.8318 | | -1.21% | -3.24% | -7.01% | -4.90% | 2.042 | 2.10% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021268 | 0.014146 | 0.87114 | 83.334 | 44.2137 | 118.2719 | 120.9695 | | -0.79% | 5.27% | -6.13% | -3.99% | 1.885 | -5.76% |

Table B.73. $^{123}$I IBZM 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 185-190 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 16.8 | 100.8 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 185-190 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023291 | 0.01426 | 0.95401 | 82.4336 | 16.9417 | 96.9887 | 100.2822 | | -1.86% | 0.84% | -3.78% | -0.51% | 4.866 | -2.69% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023173 | 0.01426 | 0.94918 | 85.1348 | 20.0933 | 102.0485 | 105.5263 | | 1.35% | 19.60% | 1.24% | 4.69% | 4.237 | -15.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023037 | 0.01426 | 0.94361 | 86.3085 | 21.2072 | 103.3882 | 106.9153 | | 2.75% | 26.23% | 2.57% | 6.07% | 4.070 | -18.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022883 | 0.01426 | 0.93728 | 86.5368 | 22.4933 | 104.0379 | 107.5925 | | 3.02% | 33.89% | 3.21% | 6.74% | 3.847 | -23.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022082 | 0.01426 | 0.90447 | 88.0466 | 24.881 | 104.8159 | 108.4055 | | 4.82% | 48.10% | 3.98% | 7.55% | 3.539 | -29.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021253 | 0.01426 | 0.87052 | 88.5839 | 28.6609 | 106.1025 | 109.7496 | | 5.46% | 70.60% | 5.26% | 8.88% | 3.091 | -38.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023291 | 0.01426 | 0.95401 | 79.2641 | 8.4632 | 85.5927 | 87.4968 | | -5.64% | -49.62% | -15.09% | -13.20% | 9.366 | 87.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023173 | 0.01426 | 0.94918 | 81.604 | 11.3016 | 90.0709 | 92.0819 | | -2.85% | -32.73% | -10.64% | -8.65% | 7.221 | 44.41% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023037 | 0.01426 | 0.94361 | 82.6537 | 12.2801 | 91.2595 | 93.2991 | | -1.60% | -26.90% | -9.46% | -7.44% | 6.731 | 34.61% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022883 | 0.01426 | 0.93728 | 82.7484 | 13.5317 | 91.8388 | 93.8945 | | -1.49% | -19.45% | -8.89% | -6.85% | 6.115 | 22.30% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022082 | 0.01426 | 0.90447 | 84.0048 | 15.7668 | 92.5501 | 94.6266 | | 0.01% | -6.15% | -8.18% | -6.12% | 5.328 | 6.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021253 | 0.01426 | 0.87052 | 84.1639 | 19.489 | 93.7085 | 95.8188 | | 0.20% | 16.01% | -7.04% | -4.94% | 4.319 | -13.63% |

Table B.74.$^{123}$I β-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | | | | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | | | | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10734 | 0.075004 | 4.3966 | 98.4473 | 96.554 | 188.3414 | 194.9237 | | -1.55% | -3.45% | -5.83% | -2.54% | 1.020 | 1.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10679 | 0.075004 | 4.3743 | 101.8318 | 104.7264 | 195.2903 | 202.1154 | | 1.83% | 4.73% | -2.35% | 1.06% | 0.972 | -2.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10617 | 0.075004 | 4.3486 | 106.9168 | 108.6437 | 199.9397 | 206.9274 | | 6.92% | 8.64% | -0.03% | 3.46% | 0.984 | -1.59% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10546 | 0.075004 | 4.3195 | 110.9981 | 109.5016 | 201.3338 | 208.3702 | | 11.00% | 9.50% | 0.67% | 4.19% | 1.014 | 1.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10176 | 0.075004 | 4.1682 | 116.0893 | 126.0281 | 206.9176 | 214.1482 | | 16.09% | 26.03% | 3.46% | 7.07% | 0.921 | -7.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.097943 | 0.075004 | 4.0118 | 122.5974 | 142.9441 | 213.986 | 221.4612 | | 22.60% | 42.94% | 6.99% | 10.73% | 0.858 | -14.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10734 | 0.075004 | 4.3966 | 87.1131 | 85.0378 | 166.2659 | 170.0732 | | -12.89% | -14.96% | -16.87% | -14.96% | 1.024 | 2.44% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10679 | 0.075004 | 4.3743 | 89.6269 | 92.7564 | 172.4178 | 176.366 | | -10.37% | -7.24% | -13.79% | -11.82% | 0.966 | -3.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10617 | 0.075004 | 4.3486 | 94.2621 | 96.103 | 176.5389 | 180.5815 | | -5.74% | -3.90% | -11.73% | -9.71% | 0.981 | -1.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10546 | 0.075004 | 4.3195 | 98.1846 | 96.5843 | 177.793 | 181.8643 | | -1.82% | -3.42% | -11.10% | -9.07% | 1.017 | 1.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10176 | 0.075004 | 4.1682 | 101.6107 | 112.5 | 182.8168 | 187.0027 | | 1.61% | 12.50% | -8.59% | -6.50% | 0.903 | -9.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.097943 | 0.075004 | 4.0118 | 106.4041 | 128.7924 | 189.1664 | 193.4962 | | 6.40% | 28.79% | -5.42% | -3.25% | 0.826 | -17.38% |

Table B.75. $^{123}$I β-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 100 | 50 | 150 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10713 | 0.075002 | 4.3882 | 97.1183 | 48.4724 | 137.6338 | 142.4088 | | -2.88% | -3.06% | -8.24% | -5.06% | 2.004 | 0.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10659 | 0.075002 | 4.3659 | 98.9925 | 55.8989 | 142.3116 | 147.2603 | | -1.01% | 11.80% | -5.13% | -1.83% | 1.771 | -11.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10596 | 0.075002 | 4.3403 | 103.128 | 59.9983 | 146.5078 | 151.6048 | | 3.13% | 20.00% | -2.33% | 1.07% | 1.719 | -14.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10525 | 0.075002 | 4.3112 | 106.9689 | 60.6377 | 147.5511 | 152.6826 | | 6.97% | 21.28% | -1.63% | 1.79% | 1.764 | -11.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10157 | 0.075002 | 4.1603 | 112.0103 | 76.785 | 153.2155 | 158.5589 | | 12.01% | 53.57% | 2.14% | 5.71% | 1.459 | -27.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.097756 | 0.075002 | 4.0041 | 118.3979 | 93.7876 | 160.4699 | 166.0743 | | 18.40% | 87.58% | 6.98% | 10.72% | 1.262 | -36.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10713 | 0.075002 | 4.3882 | 90.5695 | 37.9614 | 121.4904 | 124.252 | | -9.43% | -24.08% | -19.01% | -17.17% | 2.386 | 19.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10659 | 0.075002 | 4.3659 | 91.6693 | 45.0982 | 125.6368 | 128.4993 | | -8.33% | -9.80% | -16.24% | -14.33% | 2.033 | 1.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10596 | 0.075002 | 4.3403 | 95.3484 | 48.721 | 129.3581 | 132.3068 | | -4.65% | -2.56% | -13.76% | -11.80% | 1.957 | -2.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10525 | 0.075002 | 4.3112 | 99.0539 | 49.012 | 130.3002 | 133.2693 | | -0.95% | -1.98% | -13.13% | -11.15% | 2.021 | 1.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10157 | 0.075002 | 4.1603 | 102.4655 | 64.5561 | 135.3984 | 138.4923 | | 2.47% | 29.11% | -9.73% | -7.67% | 1.587 | -20.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.097756 | 0.075002 | 4.0041 | 107.1271 | 80.9449 | 141.9142 | 145.1617 | | 7.13% | 61.89% | -5.39% | -3.23% | 1.323 | -33.83% |

Table B.76. $^{123}$I β-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 100 | 20 | 120 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10694 | 0.075079 | 4.3802 | 96.3345 | 19.6312 | 105.3525 | 108.9291 | | -3.67% | -1.84% | -12.21% | -9.23% | 4.907 | -1.86% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1064 | 0.075079 | 4.358 | 97.3091 | 26.609 | 108.8469 | 112.5706 | | -2.69% | 33.05% | -9.29% | -6.19% | 3.657 | -26.86% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10577 | 0.075079 | 4.3324 | 100.8769 | 30.825 | 112.683 | 116.549 | | 0.88% | 54.13% | -6.10% | -2.88% | 3.273 | -34.55% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10506 | 0.075079 | 4.3034 | 104.5757 | 31.3376 | 113.3587 | 117.2467 | | 4.58% | 56.69% | -5.53% | -2.29% | 3.337 | -33.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10138 | 0.075079 | 4.1527 | 109.7113 | 47.1835 | 118.9339 | 123.0498 | | 9.71% | 135.92% | -0.89% | 2.54% | 2.325 | -53.50% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.097579 | 0.075079 | 3.9968 | 115.9983 | 64.3948 | 126.3968 | 130.7938 | | 16.00% | 221.97% | 5.33% | 8.99% | 1.801 | -63.97% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10694 | 0.075079 | 4.3802 | 92.6555 | 9.7226 | 92.9723 | 95.0401 | | -7.34% | -51.39% | -22.52% | -20.80% | 9.530 | 90.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1064 | 0.075079 | 4.358 | 92.9142 | 16.5086 | 96.0777 | 98.2311 | | -7.09% | -17.46% | -19.94% | -18.14% | 5.628 | 12.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10577 | 0.075079 | 4.3324 | 96.0206 | 20.3042 | 99.4827 | 101.7188 | | -3.98% | 1.52% | -17.10% | -15.23% | 4.729 | -5.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10506 | 0.075079 | 4.3034 | 99.5981 | 20.4841 | 100.0991 | 102.3484 | | -0.40% | 2.42% | -16.58% | -14.71% | 4.862 | -2.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10138 | 0.075079 | 4.1527 | 103.132 | 35.7181 | 105.1237 | 107.5072 | | 3.13% | 78.59% | -12.40% | -10.41% | 2.887 | -42.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.097579 | 0.075079 | 3.9968 | 107.6727 | 52.3202 | 111.8271 | 114.376 | | 7.67% | 161.60% | -6.81% | -4.69% | 2.058 | -58.84% |

Table B.77.$^{123}$I FP-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:137-142 keV,142-175 keV,175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 40 | 80 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023902 | 0.016585 | 0.97902 | 39.7736 | 38.7354 | 77.1484 | 79.8446 | | -0.57% | -3.16% | -3.56% | -0.19% | 1.027 | 2.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023781 | 0.016585 | 0.97406 | 41.5715 | 41.3101 | 80.5116 | 83.3254 | | 3.93% | 3.28% | 0.64% | 4.16% | 1.006 | 0.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023641 | 0.016585 | 0.96834 | 43.1168 | 42.3451 | 81.9633 | 84.8485 | | 7.79% | 5.86% | 2.48% | 6.06% | 1.018 | 1.82% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023483 | 0.016585 | 0.96185 | 44.0408 | 42.7668 | 82.4003 | 85.28 | | 10.10% | 6.92% | 3.00% | 6.60% | 1.030 | 2.98% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02266 | 0.016585 | 0.92817 | 45.0874 | 46.8511 | 83.7387 | 86.6651 | | 12.72% | 17.13% | 4.67% | 8.33% | 0.962 | -3.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02181 | 0.016585 | 0.89333 | 46.3656 | 50.8347 | 85.1955 | 88.1725 | | 15.91% | 27.09% | 6.49% | 10.22% | 0.912 | -8.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023902 | 0.016585 | 0.97902 | 35.2192 | 34.0897 | 68.107 | 69.6665 | | -11.95% | -14.78% | -14.87% | -12.92% | 1.033 | 3.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023781 | 0.016585 | 0.97406 | 36.7313 | 36.4473 | 71.082 | 72.7098 | | -8.17% | -8.88% | -11.15% | -9.11% | 1.008 | 0.78% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023641 | 0.016585 | 0.96834 | 38.1548 | 37.3114 | 72.3857 | 74.0433 | | -4.61% | -6.72% | -9.52% | -7.45% | 1.023 | 2.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023483 | 0.016585 | 0.96185 | 39.0209 | 37.6438 | 72.7591 | 74.4252 | | -2.45% | -5.89% | -9.05% | -6.97% | 1.037 | 3.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02266 | 0.016585 | 0.92817 | 39.66 | 41.596 | 73.9637 | 75.6574 | | -0.85% | 3.99% | -7.55% | -5.43% | 0.953 | -4.65% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02181 | 0.016585 | 0.89333 | 40.5381 | 45.4564 | 75.2754 | 76.9988 | | 1.35% | 13.64% | -5.91% | -3.75% | 0.892 | -10.82% |

Table B.78. $^{123}$I FP-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data,Energy Windows Used:137-142 keV,142-175 keV,175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 20 | 60 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023809 | 0.016537 | 0.97522 | 39.2431 | 19.5058 | 57.1495 | 59.1321 | | -1.89% | -2.47% | -4.75% | -1.45% | 2.012 | 0.59% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023688 | 0.016537 | 0.97028 | 40.4378 | 21.7816 | 59.6113 | 61.6825 | | 1.09% | 8.91% | -0.65% | 2.80% | 1.857 | -7.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023549 | 0.016537 | 0.96459 | 41.5996 | 22.8942 | 60.8642 | 62.9797 | | 4.00% | 14.47% | 1.44% | 4.97% | 1.817 | -9.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023392 | 0.016537 | 0.95812 | 42.4246 | 23.2303 | 61.1089 | 63.2328 | | 6.06% | 16.15% | 1.85% | 5.39% | 1.826 | -8.69% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022572 | 0.016537 | 0.92457 | 43.5041 | 27.1105 | 62.4235 | 64.5978 | | 8.76% | 35.55% | 4.04% | 7.66% | 1.605 | -19.77% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021725 | 0.016537 | 0.88987 | 44.7131 | 31.1864 | 63.9847 | 66.2168 | | 11.78% | 55.93% | 6.64% | 10.36% | 1.434 | -28.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023809 | 0.016537 | 0.97522 | 36.6026 | 15.2618 | 50.4476 | 51.5942 | | -8.49% | -23.69% | -15.92% | -14.01% | 2.398 | 19.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023688 | 0.016537 | 0.97028 | 37.5498 | 17.3863 | 52.6263 | 53.8243 | | -6.13% | -13.07% | -12.29% | -10.29% | 2.160 | 7.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023549 | 0.016537 | 0.96459 | 38.5872 | 18.3654 | 53.7369 | 54.9606 | | -3.53% | -8.17% | -10.44% | -8.40% | 2.101 | 5.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023392 | 0.016537 | 0.95812 | 39.3636 | 18.6238 | 53.9577 | 55.1865 | | -1.59% | -6.88% | -10.07% | -8.02% | 2.114 | 5.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022572 | 0.016537 | 0.92457 | 40.0533 | 22.3716 | 55.1415 | 56.3999 | | 0.13% | 11.86% | -8.10% | -6.00% | 1.790 | -10.48% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021725 | 0.016537 | 0.88987 | 40.8512 | 26.3315 | 56.5462 | 57.8387 | | 2.13% | 31.66% | -5.76% | -3.60% | 1.551 | -22.43% |

Table B.79.$^{123}$I FP-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:137-142 keV,142-175 keV,175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 8 | 48 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023685 | 0.016599 | 0.97015 | 38.9363 | 7.9791 | 44.6014 | 46.1159 | | -2.66% | -0.26% | -7.08% | -3.93% | 4.880 | -2.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023565 | 0.016599 | 0.96523 | 39.7724 | 10.0795 | 46.4782 | 48.0651 | | -0.57% | 25.99% | -3.17% | 0.14% | 3.946 | -21.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023427 | 0.016599 | 0.95957 | 40.7088 | 11.2419 | 47.6008 | 49.2297 | | 1.77% | 40.52% | -0.83% | 2.56% | 3.621 | -27.58% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02327 | 0.016599 | 0.95313 | 41.4753 | 11.5345 | 47.7846 | 49.4203 | | 3.69% | 44.18% | -0.45% | 2.96% | 3.596 | -28.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022455 | 0.016599 | 0.91976 | 42.561 | 15.3464 | 49.1272 | 50.8202 | | 6.40% | 91.83% | 2.35% | 5.88% | 2.773 | -44.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021612 | 0.016599 | 0.88524 | 43.7977 | 19.4269 | 50.7824 | 52.5414 | | 9.49% | 142.84% | 5.80% | 9.46% | 2.254 | -54.91% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023685 | 0.016599 | 0.97015 | 37.4428 | 3.9749 | 39.3615 | 40.2371 | | -6.39% | -50.31% | -18.00% | -16.17% | 9.420 | 88.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023565 | 0.016599 | 0.96523 | 38.0541 | 5.963 | 41.0243 | 41.942 | | -4.86% | -25.46% | -14.53% | -12.62% | 6.382 | 27.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023427 | 0.016599 | 0.95957 | 38.864 | 7.0139 | 42.0203 | 42.9624 | | -2.84% | -12.33% | -12.46% | -10.50% | 5.541 | 10.82% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02327 | 0.016599 | 0.95313 | 39.5867 | 7.2356 | 42.1874 | 43.1334 | | -1.03% | -9.56% | -12.11% | -10.14% | 5.471 | 9.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022455 | 0.016599 | 0.91976 | 40.2887 | 10.9151 | 43.3976 | 44.3775 | | 0.72% | 36.44% | -9.59% | -7.55% | 3.691 | -26.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021612 | 0.016599 | 0.88524 | 41.1125 | 14.877 | 44.8869 | 45.9055 | | 2.78% | 85.96% | -6.49% | -4.36% | 2.763 | -44.73% |

Table B.80.$^{123}$I IBZM 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 84 | 168 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022638 | 0.015763 | 0.92726 | 84.2507 | 81.7339 | 164.2374 | 169.9773 | | 0.30% | -2.70% | -2.24% | 1.18% | 1.031 | 3.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022524 | 0.015763 | 0.92256 | 88.6898 | 86.1439 | 171.7289 | 177.7306 | | 5.58% | 2.55% | 2.22% | 5.79% | 1.030 | 2.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022391 | 0.015763 | 0.91715 | 91.2325 | 87.5716 | 174.269 | 180.3594 | | 8.61% | 4.25% | 3.73% | 7.36% | 1.042 | 4.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022241 | 0.015763 | 0.911 | 92.2083 | 88.5 | 174.9872 | 181.1026 | | 9.77% | 5.36% | 4.16% | 7.80% | 1.042 | 4.19% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021462 | 0.015763 | 0.8791 | 92.9928 | 93.4848 | 176.6444 | 182.8179 | | 10.71% | 11.29% | 5.15% | 8.82% | 0.995 | -0.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020657 | 0.015763 | 0.8461 | 94.0784 | 97.7689 | 178.0703 | 184.2935 | | 12.00% | 16.39% | 5.99% | 9.70% | 0.962 | -3.77% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022638 | 0.015763 | 0.92726 | 74.6316 | 71.9014 | 144.9901 | 148.3102 | | -11.15% | -14.40% | -13.70% | -11.72% | 1.038 | 3.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022524 | 0.015763 | 0.92256 | 78.5603 | 75.8023 | 151.6166 | 155.0885 | | -6.48% | -9.76% | -9.75% | -7.69% | 1.036 | 3.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022391 | 0.015763 | 0.91715 | 80.9297 | 76.9536 | 153.8666 | 157.39 | | -3.66% | -8.39% | -8.41% | -6.32% | 1.052 | 5.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022241 | 0.015763 | 0.911 | 81.7981 | 77.7786 | 154.5064 | 158.0444 | | -2.62% | -7.41% | -8.03% | -5.93% | 1.052 | 5.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021462 | 0.015763 | 0.8791 | 82.0905 | 82.6499 | 155.9977 | 159.5699 | | -2.27% | -1.61% | -7.14% | -5.02% | 0.993 | -0.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020657 | 0.015763 | 0.8461 | 82.7481 | 86.8276 | 157.2824 | 160.8839 | | -1.49% | 3.37% | -6.38% | -4.24% | 0.953 | -4.70% |

Table B.81.$^{123}$I IBZM 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data, Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 42 | 126 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022439 | 0.015469 | 0.91911 | 83.135 | 41.2562 | 122.3436 | 126.5878 | | -1.03% | -1.77% | -2.90% | 0.47% | 2.015 | 0.75% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022326 | 0.015469 | 0.91446 | 86.3062 | 45.0365 | 128.1669 | 132.6175 | | 2.75% | 7.23% | 1.72% | 5.25% | 1.916 | -4.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022195 | 0.015469 | 0.90909 | 88.0405 | 46.6309 | 130.3034 | 134.8293 | | 4.81% | 11.03% | 3.42% | 7.01% | 1.888 | -5.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022046 | 0.015469 | 0.90299 | 88.8027 | 47.3787 | 130.8399 | 135.3852 | | 5.72% | 12.81% | 3.84% | 7.45% | 1.874 | -6.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021274 | 0.015469 | 0.87138 | 89.6186 | 51.9341 | 132.4014 | 137.0078 | | 6.69% | 23.65% | 5.08% | 8.74% | 1.726 | -13.72% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020475 | 0.015469 | 0.83867 | 90.4979 | 56.3555 | 133.9113 | 138.5758 | | 7.74% | 34.18% | 6.28% | 9.98% | 1.606 | -19.71% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022439 | 0.015469 | 0.91911 | 77.5447 | 32.2691 | 107.9969 | 110.4516 | | -7.68% | -23.17% | -14.29% | -12.34% | 2.403 | 20.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022326 | 0.015469 | 0.91446 | 80.2857 | 35.679 | 113.1489 | 115.7232 | | -4.42% | -15.05% | -10.20% | -8.16% | 2.250 | 12.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022195 | 0.015469 | 0.90909 | 81.841 | 37.0752 | 115.0428 | 117.6609 | | -2.57% | -11.73% | -8.70% | -6.62% | 2.207 | 10.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022046 | 0.015469 | 0.90299 | 82.5159 | 37.7441 | 115.522 | 118.1514 | | -1.77% | -10.13% | -8.32% | -6.23% | 2.186 | 9.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021274 | 0.015469 | 0.87138 | 82.8777 | 42.1893 | 116.9293 | 119.5947 | | -1.34% | 0.45% | -7.20% | -5.08% | 1.964 | -1.78% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020475 | 0.015469 | 0.83867 | 83.3115 | 46.5274 | 118.2892 | 120.9888 | | -0.82% | 10.78% | -6.12% | -3.98% | 1.791 | -10.47% |

Table B.82.$^{123}$I IBZM 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data, Energy Windows Used: 137-142 keV, 142-175 keV, 175-180 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 16.8 | 100.8 | | | | | 137-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 175-180 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022329 | 0.015376 | 0.91461 | 82.4633 | 16.9684 | 96.2792 | 99.5488 | | -1.83% | 1.00% | -4.48% | -1.24% | 4.860 | -2.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022216 | 0.015376 | 0.90998 | 84.8727 | 20.3706 | 101.0172 | 104.4614 | | 1.04% | 21.25% | 0.22% | 3.63% | 4.166 | -16.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022086 | 0.015376 | 0.90464 | 86.1226 | 22.0635 | 102.8464 | 106.3589 | | 2.53% | 31.33% | 2.03% | 5.51% | 3.903 | -21.93% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021938 | 0.015376 | 0.89857 | 86.755 | 22.7045 | 103.2197 | 106.7471 | | 3.28% | 35.15% | 2.40% | 5.90% | 3.821 | -23.58% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02117 | 0.015376 | 0.86711 | 87.55 | 27.0343 | 104.6274 | 108.2188 | | 4.23% | 60.92% | 3.80% | 7.36% | 3.238 | -35.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020375 | 0.015376 | 0.83456 | 88.3982 | 31.4879 | 106.2615 | 109.923 | | 5.24% | 87.43% | 5.42% | 9.05% | 2.807 | -43.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022329 | 0.015376 | 0.91461 | 79.2904 | 8.4888 | 84.9692 | 86.8596 | | -5.61% | -49.47% | -15.71% | -13.83% | 9.341 | 86.81% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022216 | 0.015376 | 0.90998 | 81.318 | 11.6038 | 89.1631 | 91.1547 | | -3.19% | -30.93% | -11.54% | -9.57% | 7.008 | 40.16% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022086 | 0.015376 | 0.90464 | 82.3858 | 13.1453 | 90.7864 | 92.8177 | | -1.92% | -21.75% | -9.93% | -7.92% | 6.267 | 25.35% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021938 | 0.015376 | 0.89857 | 82.9424 | 13.7226 | 91.1214 | 93.1614 | | -1.26% | -18.32% | -9.60% | -7.58% | 6.044 | 20.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02117 | 0.015376 | 0.86711 | 83.3044 | 17.9468 | 92.393 | 94.4708 | | -0.83% | 6.83% | -8.34% | -6.28% | 4.642 | -7.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020375 | 0.015376 | 0.83456 | 83.7014 | 22.321 | 93.8649 | 95.984 | | -0.36% | 32.86% | -6.88% | -4.78% | 3.750 | -25.00% |

Table B.83. $^{123}$I β-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo6_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 100 | 100 | 200 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10838 | 0.080209 | 4.4394 | 99.7016 | 95.0476 | 188.8207 | 195.4196 | | -0.30% | -4.95% | -5.59% | -2.29% | 1.049 | 4.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10783 | 0.080209 | 4.4169 | 102.1356 | 105.7046 | 197.4808 | 204.3824 | | 2.14% | 5.70% | -1.26% | 2.19% | 0.966 | -3.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1072 | 0.080209 | 4.391 | 104.9355 | 111.3563 | 200.7568 | 207.7726 | | 4.94% | 11.36% | 0.38% | 3.89% | 0.942 | -5.77% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10648 | 0.080209 | 4.3615 | 109.0985 | 111.0185 | 200.5927 | 207.6031 | | 9.10% | 11.02% | 0.30% | 3.80% | 0.983 | -1.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10275 | 0.080209 | 4.2088 | 109.6653 | 129.2684 | 203.5974 | 210.7092 | | 9.67% | 29.27% | 1.80% | 5.35% | 0.848 | -15.16% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.098898 | 0.080209 | 4.0509 | 118.4949 | 141.0424 | 209.3846 | 216.698 | | 18.49% | 41.04% | 4.69% | 8.35% | 0.840 | -15.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10838 | 0.080209 | 4.4394 | 88.4866 | 83.444 | 166.6921 | 170.5091 | | -11.51% | -16.56% | -16.65% | -14.75% | 1.060 | 6.04% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10783 | 0.080209 | 4.4169 | 89.8031 | 93.7175 | 174.3623 | 178.355 | | -10.20% | -6.28% | -12.82% | -10.82% | 0.958 | -4.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1072 | 0.080209 | 4.391 | 92.0112 | 99.0085 | 177.2746 | 181.3338 | | -7.99% | -0.99% | -11.36% | -9.33% | 0.929 | -7.07% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10648 | 0.080209 | 4.3615 | 96.1153 | 98.3178 | 177.1456 | 181.2021 | | -3.88% | -1.68% | -11.43% | -9.40% | 0.978 | -2.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10275 | 0.080209 | 4.2088 | 94.8741 | 116.4238 | 179.8769 | 183.9939 | | -5.13% | 16.42% | -10.06% | -8.00% | 0.815 | -18.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.098898 | 0.080209 | 4.0509 | 102.4931 | 127.3691 | 185.0934 | 189.3294 | | 2.49% | 27.37% | -7.45% | -5.34% | 0.805 | -19.53% |

Table B.84.$^{123}$I β-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 100 | 50 | 150 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10824 | 0.080231 | 4.4336 | 98.5975 | 47.7637 | 138.8228 | 143.6362 | | -1.40% | -4.47% | -7.45% | -4.24% | 2.064 | 3.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10769 | 0.080231 | 4.4111 | 99.3647 | 57.6968 | 145.2142 | 150.2664 | | -0.64% | 15.39% | -3.19% | 0.18% | 1.722 | -13.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10706 | 0.080231 | 4.3853 | 101.2879 | 63.4878 | 147.8679 | 153.0184 | | 1.29% | 26.98% | -1.42% | 2.01% | 1.595 | -20.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10634 | 0.080231 | 4.3558 | 105.0308 | 63.2286 | 147.4324 | 152.5651 | | 5.03% | 26.46% | -1.71% | 1.71% | 1.661 | -16.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10262 | 0.080231 | 4.2033 | 104.9534 | 81.8084 | 150.8622 | 156.1304 | | 4.95% | 63.62% | 0.57% | 4.09% | 1.283 | -35.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.098769 | 0.080231 | 4.0456 | 113.494 | 93.7431 | 156.5955 | 162.066 | | 13.49% | 87.49% | 4.40% | 8.04% | 1.211 | -39.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10824 | 0.080231 | 4.4336 | 92.0883 | 37.1239 | 122.5413 | 125.3252 | | -7.91% | -25.75% | -18.31% | -16.45% | 2.481 | 24.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10769 | 0.080231 | 4.4111 | 91.8351 | 46.8527 | 128.2089 | 131.1314 | | -8.16% | -6.29% | -14.53% | -12.58% | 1.960 | -2.00% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10706 | 0.080231 | 4.3853 | 93.165 | 52.3685 | 130.5715 | 133.5514 | | -6.83% | 4.74% | -12.95% | -10.97% | 1.779 | -11.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10634 | 0.080231 | 4.3558 | 96.8474 | 51.7965 | 130.2011 | 133.171 | | -3.15% | 3.59% | -13.20% | -11.22% | 1.870 | -6.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10262 | 0.080231 | 4.2033 | 94.9345 | 70.2915 | 133.3161 | 136.3665 | | -5.07% | 40.58% | -11.12% | -9.09% | 1.351 | -32.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.098769 | 0.080231 | 4.0456 | 102.2465 | 81.425 | 138.4834 | 141.6532 | | 2.25% | 62.85% | -7.68% | -5.56% | 1.256 | -37.21% |

Table B.85. $^{123}$I β-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (micr | RStr (micr | Sum (microCi) | | | | | TEW_lo6_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 100 | 20 | 120 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10805 | 0.080336 | 4.4256 | 97.9565 | 19.4058 | 107.7067 | 111.3608 | | -2.04% | -2.97% | -10.24% | -7.20% | 5.048 | 0.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1075 | 0.080336 | 4.4032 | 97.7337 | 28.9073 | 112.6082 | 116.4689 | | -2.27% | 44.54% | -6.16% | -2.94% | 3.381 | -32.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10687 | 0.080336 | 4.3774 | 99.1358 | 34.7897 | 114.8699 | 118.8251 | | -0.86% | 73.95% | -4.28% | -0.98% | 2.850 | -43.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10615 | 0.080336 | 4.348 | 102.6642 | 34.5724 | 114.5148 | 118.4546 | | 2.66% | 72.86% | -4.57% | -1.29% | 2.970 | -40.61% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10244 | 0.080336 | 4.1958 | 102.258 | 53.3105 | 117.5889 | 121.6747 | | 2.26% | 166.55% | -2.01% | 1.40% | 1.918 | -61.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.098591 | 0.080336 | 4.0383 | 110.6737 | 65.4467 | 123.5409 | 127.843 | | 10.67% | 227.23% | 2.95% | 6.54% | 1.691 | -66.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10805 | 0.080336 | 4.4256 | 94.2683 | 9.3432 | 95.0502 | 97.1628 | | -5.73% | -53.28% | -20.79% | -19.03% | 10.090 | 101.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1075 | 0.080336 | 4.4032 | 93.0835 | 18.7465 | 99.4067 | 101.6395 | | -6.92% | -6.27% | -17.16% | -15.30% | 4.965 | -0.69% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10687 | 0.080336 | 4.3774 | 93.8907 | 24.4042 | 101.4253 | 103.7133 | | -6.11% | 22.02% | -15.48% | -13.57% | 3.847 | -23.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10615 | 0.080336 | 4.348 | 97.3587 | 23.893 | 101.127 | 103.4064 | | -2.64% | 19.47% | -15.73% | -13.83% | 4.075 | -18.50% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.10244 | 0.080336 | 4.1958 | 95.1048 | 42.5743 | 103.9312 | 106.2973 | | -4.90% | 112.87% | -13.39% | -11.42% | 2.234 | -55.32% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.098591 | 0.080336 | 4.0383 | 102.2726 | 53.9163 | 109.2921 | 111.7857 | | 2.27% | 169.58% | -8.92% | -6.85% | 1.897 | -62.06% |

Table B.86.$^{123}$I FP-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:139-144 keV,142-175 keV,173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo6_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 40 | 80 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023962 | 0.017877 | 0.9815 | 39.7837 | 38.2759 | 76.7179 | 79.399 | | -0.54% | -4.31% | -4.10% | -0.75% | 1.039 | 3.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023841 | 0.017877 | 0.97653 | 41.4143 | 41.4059 | 80.4794 | 83.2921 | | 3.54% | 3.51% | 0.60% | 4.12% | 1.000 | 0.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023701 | 0.017877 | 0.9708 | 42.3299 | 42.9011 | 81.6349 | 84.488 | | 5.82% | 7.25% | 2.04% | 5.61% | 0.987 | -1.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023542 | 0.017877 | 0.96428 | 43.3772 | 42.9642 | 81.7551 | 84.6123 | | 8.44% | 7.41% | 2.19% | 5.77% | 1.010 | 0.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022718 | 0.017877 | 0.93052 | 43.6113 | 47.2691 | 82.6952 | 85.5849 | | 9.03% | 18.17% | 3.37% | 6.98% | 0.923 | -7.74% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021865 | 0.017877 | 0.89559 | 45.4734 | 50.1448 | 83.8892 | 86.8205 | | 13.68% | 25.36% | 4.86% | 8.53% | 0.907 | -9.32% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023962 | 0.017877 | 0.9815 | 35.2727 | 33.6406 | 67.728 | 69.2789 | | -11.82% | -15.90% | -15.34% | -13.40% | 1.049 | 4.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023841 | 0.017877 | 0.97653 | 36.5611 | 36.5651 | 71.0566 | 72.6837 | | -8.60% | -8.59% | -11.18% | -9.15% | 1.000 | -0.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023701 | 0.017877 | 0.9708 | 37.3172 | 37.9473 | 72.082 | 73.7326 | | -6.71% | -5.13% | -9.90% | -7.83% | 0.983 | -1.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023542 | 0.017877 | 0.96428 | 38.3354 | 37.9183 | 72.1923 | 73.8455 | | -4.16% | -5.20% | -9.76% | -7.69% | 1.011 | 1.10% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022718 | 0.017877 | 0.93052 | 38.1417 | 42.1787 | 73.0418 | 74.7142 | | -4.65% | 5.45% | -8.70% | -6.61% | 0.904 | -9.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021865 | 0.017877 | 0.89559 | 39.7106 | 44.8791 | 74.1204 | 75.8174 | | -0.72% | 12.20% | -7.35% | -5.23% | 0.885 | -11.52% |

Table B.87.$^{123}$I FP-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:139-144 keV,142-175 keV,173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 20 | 60 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024034 | 0.017744 | 0.98442 | 39.3211 | 19.3413 | 57.0751 | 59.0547 | | -1.70% | -3.29% | -4.87% | -1.58% | 2.033 | 1.65% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023912 | 0.017744 | 0.97944 | 40.2785 | 22.1745 | 59.8704 | 61.9514 | | 0.70% | 10.87% | -0.22% | 3.25% | 1.816 | -9.18% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023772 | 0.017744 | 0.97369 | 40.8339 | 23.7174 | 60.771 | 62.8852 | | 2.08% | 18.59% | 1.29% | 4.81% | 1.722 | -13.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023612 | 0.017744 | 0.96716 | 41.7174 | 23.7911 | 60.7896 | 62.904 | | 4.29% | 18.96% | 1.32% | 4.84% | 1.753 | -12.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022786 | 0.017744 | 0.9333 | 41.7011 | 28.1147 | 61.5147 | 63.6597 | | 4.25% | 40.57% | 2.52% | 6.10% | 1.483 | -25.84% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02193 | 0.017744 | 0.89827 | 43.4659 | 31.0139 | 62.7574 | 64.9473 | | 8.66% | 55.07% | 4.60% | 8.25% | 1.401 | -29.93% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.024034 | 0.017744 | 0.98442 | 36.6947 | 15.0939 | 50.3824 | 51.5274 | | -8.26% | -24.53% | -16.03% | -14.12% | 2.431 | 21.55% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023912 | 0.017744 | 0.97944 | 37.3497 | 17.794 | 52.8576 | 54.0614 | | -6.63% | -11.03% | -11.90% | -9.90% | 2.099 | 4.95% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023772 | 0.017744 | 0.97369 | 37.7459 | 19.2592 | 53.6581 | 54.8813 | | -5.64% | -3.70% | -10.57% | -8.53% | 1.960 | -2.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023612 | 0.017744 | 0.96716 | 38.6017 | 19.2567 | 53.6785 | 54.9018 | | -3.50% | -3.72% | -10.54% | -8.50% | 2.005 | 0.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022786 | 0.017744 | 0.9333 | 38.1574 | 23.5608 | 54.339 | 55.5805 | | -4.61% | 17.80% | -9.44% | -7.37% | 1.620 | -19.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02193 | 0.017744 | 0.89827 | 39.6254 | 26.2949 | 55.46 | 56.7279 | | -0.94% | 31.47% | -7.57% | -5.45% | 1.507 | -24.65% |

Table B.88.$^{123}$I FP-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:139-144 keV,142-175 keV,173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 8 | 48 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023993 | 0.017749 | 0.98275 | 39.0574 | 7.9948 | 44.7253 | 46.244 | | -2.36% | -0.07% | -6.82% | -3.66% | 4.885 | -2.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023871 | 0.017749 | 0.97777 | 39.6151 | 10.6548 | 46.9155 | 48.5199 | | -0.96% | 33.19% | -2.26% | 1.08% | 3.718 | -25.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023731 | 0.017749 | 0.97203 | 39.9625 | 12.2296 | 47.6343 | 49.2688 | | -0.09% | 52.87% | -0.76% | 2.64% | 3.268 | -34.65% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023572 | 0.017749 | 0.96551 | 40.7579 | 12.3132 | 47.5941 | 49.2268 | | 1.89% | 53.92% | -0.85% | 2.56% | 3.310 | -33.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022747 | 0.017749 | 0.93171 | 40.6084 | 16.6905 | 48.2977 | 49.9676 | | 1.52% | 108.63% | 0.62% | 4.10% | 2.433 | -51.34% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021893 | 0.017749 | 0.89674 | 42.3032 | 19.6356 | 49.5385 | 51.2561 | | 5.76% | 145.45% | 3.21% | 6.78% | 2.154 | -56.91% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023993 | 0.017749 | 0.98275 | 37.5602 | 3.9784 | 39.4714 | 40.3494 | | -6.10% | -50.27% | -17.77% | -15.94% | 9.441 | 88.82% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023871 | 0.017749 | 0.97777 | 37.8389 | 6.5482 | 41.413 | 42.3409 | | -5.40% | -18.15% | -13.72% | -11.79% | 5.779 | 77.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023731 | 0.017749 | 0.97203 | 38.027 | 8.0655 | 42.0535 | 42.9989 | | -4.93% | 0.82% | -12.39% | -10.42% | 4.715 | -28.52% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.023572 | 0.017749 | 0.96551 | 38.795 | 8.0814 | 42.0217 | 42.9662 | | -3.01% | 1.02% | -12.45% | -10.49% | 4.801 | -19.95% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022747 | 0.017749 | 0.93171 | 38.2135 | 12.4514 | 42.6655 | 43.632 | | -4.47% | 55.64% | -11.11% | -9.10% | 3.069 | -38.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021893 | 0.017749 | 0.89674 | 39.6068 | 15.2378 | 43.785 | 44.7796 | | -0.98% | 90.47% | -8.78% | -6.71% | 2.599 | -48.02% |

Table B.89.$^{123}$I IBZM 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data, Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo6_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 84 | 168 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022806 | 0.016692 | 0.93414 | 83.502 | 80.8644 | 162.2958 | 167.9677 | | -0.59% | -3.73% | -3.40% | -0.02% | 1.033 | 3.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022691 | 0.016692 | 0.92941 | 87.8468 | 85.7919 | 170.2698 | 176.2205 | | 4.58% | 2.13% | 1.35% | 4.89% | 1.024 | 2.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022557 | 0.016692 | 0.92395 | 89.4397 | 87.7959 | 172.3545 | 178.3781 | | 6.48% | 4.52% | 2.59% | 6.18% | 1.019 | 1.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022406 | 0.016692 | 0.91776 | 90.7409 | 88.1347 | 172.7217 | 178.7581 | | 8.02% | 4.92% | 2.81% | 6.40% | 1.030 | 2.96% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021622 | 0.016692 | 0.88562 | 91.0605 | 92.7255 | 173.4616 | 179.5238 | | 8.41% | 10.39% | 3.25% | 6.86% | 0.982 | -1.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02081 | 0.016692 | 0.85238 | 92.5338 | 96.034 | 174.6787 | 180.7833 | | 10.16% | 14.33% | 3.98% | 7.61% | 0.964 | -3.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022806 | 0.016692 | 0.93414 | 73.9801 | 71.1269 | 143.278 | 146.559 | | -11.93% | -15.33% | -14.72% | -12.76% | 1.040 | 4.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022691 | 0.016692 | 0.92941 | 77.7591 | 75.5517 | 150.3322 | 153.7747 | | -7.43% | -10.06% | -10.52% | -8.47% | 1.029 | 2.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022557 | 0.016692 | 0.92395 | 79.1341 | 77.366 | 152.1799 | 155.6647 | | -5.79% | -7.90% | -9.42% | -7.34% | 1.023 | 2.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022406 | 0.016692 | 0.91776 | 80.3743 | 77.5842 | 152.5085 | 156.0008 | | -4.32% | -7.64% | -9.22% | -7.14% | 1.036 | 3.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021622 | 0.016692 | 0.88562 | 80.2388 | 82.1181 | 153.1816 | 156.6893 | | -4.48% | -2.24% | -8.82% | -6.73% | 0.977 | -2.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02081 | 0.016692 | 0.85238 | 81.3792 | 85.2851 | 154.2795 | 157.8123 | | -3.12% | 1.53% | -8.17% | -6.06% | 0.954 | -4.58% |

Table B.90.$^{123}$I IBZM 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo6_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 42 | 126 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022739 | 0.016556 | 0.93138 | 82.5649 | 41.0436 | 121.2591 | 125.4657 | | -1.71% | -2.28% | -3.76% | -0.42% | 2.012 | 0.58% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022624 | 0.016556 | 0.92667 | 85.5053 | 45.3585 | 127.2534 | 131.6736 | | 1.79% | 8.00% | 0.99% | 4.50% | 1.885 | -5.75% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022491 | 0.016556 | 0.92123 | 86.3539 | 47.4739 | 128.8982 | 133.3785 | | 2.80% | 13.03% | 2.30% | 5.86% | 1.819 | -9.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02234 | 0.016556 | 0.91505 | 87.3296 | 47.8423 | 129.1372 | 133.6256 | | 3.96% | 13.91% | 2.49% | 6.05% | 1.825 | -8.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021558 | 0.016556 | 0.88301 | 87.1643 | 52.5287 | 129.786 | 134.3044 | | 3.77% | 25.07% | 3.00% | 6.59% | 1.659 | -17.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020749 | 0.016556 | 0.84987 | 88.4262 | 55.926 | 130.9442 | 135.5064 | | 5.27% | 33.16% | 3.92% | 7.54% | 1.581 | -20.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022739 | 0.016556 | 0.93138 | 77.0059 | 32.1184 | 107.0405 | 109.4735 | | -8.33% | -23.53% | -15.05% | -13.12% | 2.398 | 19.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022624 | 0.016556 | 0.92667 | 79.4626 | 36.0814 | 112.345 | 114.9018 | | -5.40% | -14.09% | -10.84% | -8.81% | 2.202 | 10.12% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022491 | 0.016556 | 0.92123 | 80.0927 | 38.0799 | 113.8049 | 116.3967 | | -4.65% | -9.33% | -9.68% | -7.62% | 2.103 | 5.16% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02234 | 0.016556 | 0.91505 | 81.0088 | 38.3597 | 114.0203 | 116.6169 | | -3.56% | -8.67% | -9.51% | -7.45% | 2.112 | 5.59% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021558 | 0.016556 | 0.88301 | 80.3782 | 43.0398 | 114.6136 | 117.228 | | -4.31% | 2.48% | -9.04% | -6.96% | 1.868 | -6.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020749 | 0.016556 | 0.84987 | 81.2952 | 46.3194 | 115.659 | 118.2993 | | -3.22% | 10.28% | -8.21% | -6.11% | 1.755 | -12.24% |

Table B.91. $^{123}$I IBZM 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 139-144 keV, 142-175 keV, 173-178 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo6_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 16.8 | 100.8 | | | | | 139-144 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | 173-178 | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022746 | 0.016451 | 0.93168 | 81.9953 | 17.1425 | 95.5555 | 98.8018 | | -2.39% | 2.04% | -5.20% | -1.98% | 4.783 | -4.34% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022631 | 0.016451 | 0.92696 | 84.0887 | 21.0884 | 100.3462 | 103.7715 | | 0.11% | 25.53% | -0.45% | 2.95% | 3.987 | -20.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022498 | 0.016451 | 0.92152 | 84.4891 | 23.2672 | 101.6121 | 105.089 | | 0.58% | 38.50% | 0.81% | 4.25% | 3.631 | -27.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022347 | 0.016451 | 0.91534 | 85.2719 | 23.6504 | 101.741 | 105.2232 | | 1.51% | 40.78% | 0.93% | 4.39% | 3.606 | -27.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021565 | 0.016451 | 0.88329 | 84.8373 | 28.3728 | 102.2657 | 105.7835 | | 1.00% | 68.89% | 1.45% | 4.94% | 2.990 | -40.20% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020755 | 0.016451 | 0.85013 | 85.9792 | 31.8285 | 103.4498 | 107.0179 | | 2.36% | 89.46% | 2.63% | 6.17% | 2.701 | -45.97% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022746 | 0.016451 | 0.93168 | 78.8148 | 8.7057 | 84.3314 | 86.2083 | | -6.17% | -48.18% | -16.34% | -14.48% | 9.053 | 81.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022631 | 0.016451 | 0.92696 | 80.4744 | 12.3903 | 88.5736 | 90.5544 | | -4.20% | -26.25% | -12.13% | -10.16% | 6.495 | 29.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022498 | 0.016451 | 0.92152 | 80.6565 | 14.4961 | 89.7 | 91.7108 | | -3.98% | -13.71% | -11.01% | -9.02% | 5.564 | 11.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.022347 | 0.016451 | 0.91534 | 81.381 | 14.8094 | 89.8181 | 91.8321 | | -3.12% | -11.85% | -10.89% | -8.90% | 5.495 | 9.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.021565 | 0.016451 | 0.88329 | 80.479 | 19.5525 | 90.3034 | 92.3386 | | -4.19% | 16.38% | -10.41% | -8.39% | 4.116 | -17.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.020755 | 0.016451 | 0.85013 | 81.2689 | 22.9029 | 91.3725 | 93.4373 | | -3.25% | 36.33% | -9.35% | -7.30% | 3.548 | -29.03% |

Table B.92.$^{123}$I β-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi0 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 100 | 100 | 200 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13363 | 0.05932 | 5.4734 | 85.4401 | 92.0137 | 173.777 | 179.8498 | | -14.56% | -7.99% | -13.11% | -10.08% | 0.929 | -7.14% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13295 | 0.05932 | 5.4457 | 88.0216 | 99.956 | 181.7591 | 188.1097 | | -11.98% | -0.04% | -9.12% | -5.95% | 0.881 | -11.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13217 | 0.05932 | 5.4138 | 90.6672 | 102.7235 | 184.2469 | 190.6845 | | -9.33% | 2.72% | -7.88% | -4.66% | 0.883 | -11.74% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13129 | 0.05932 | 5.3775 | 91.2102 | 105.9974 | 185.276 | 191.7488 | | -8.79% | 6.00% | -7.36% | -4.13% | 0.860 | -13.95% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12669 | 0.05932 | 5.1892 | 96.3169 | 112.1593 | 184.8707 | 191.3291 | | -3.68% | 12.16% | -7.56% | -4.34% | 0.859 | -14.12% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12193 | 0.05932 | 4.9944 | 101.253 | 122.365 | 189.635 | 196.2583 | | 1.25% | 22.37% | -5.18% | -1.87% | 0.827 | -17.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13363 | 0.05932 | 5.4734 | 74.777 | 81.874 | 153.4006 | 156.9131 | | -25.22% | -18.13% | -23.30% | -21.54% | 0.913 | -8.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13295 | 0.05932 | 5.4457 | 76.5209 | 89.4446 | 160.4628 | 164.1363 | | -23.48% | -10.56% | -19.77% | -17.93% | 0.856 | -14.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13217 | 0.05932 | 5.4138 | 78.8569 | 91.9069 | 162.6678 | 166.3919 | | -21.14% | -8.09% | -18.67% | -16.80% | 0.858 | -14.20% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13129 | 0.05932 | 5.3775 | 79.0601 | 95.1025 | 163.5896 | 167.3343 | | -20.94% | -4.90% | -18.21% | -16.33% | 0.831 | -16.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12669 | 0.05932 | 5.1892 | 83.4986 | 100.767 | 163.2848 | 167.0224 | | -16.50% | 0.77% | -18.36% | -16.49% | 0.829 | -17.14% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12193 | 0.05932 | 4.9944 | 87.3982 | 110.468 | 167.5509 | 171.3852 | | -12.60% | 10.47% | -16.22% | -14.31% | 0.791 | -20.88% |

Table B.93. $^{123}$I β-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_h0 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 100 | 50 | 150 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13026 | 0.059651 | 5.3353 | 85.7867 | 43.5601 | 124.4859 | 128.8062 | | -14.21% | -12.88% | -17.01% | -14.13% | 1.969 | -1.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1296 | 0.059651 | 5.3083 | 87.4491 | 49.8642 | 129.9025 | 134.4204 | | -12.55% | -0.27% | -13.40% | -10.39% | 1.754 | -12.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12884 | 0.059651 | 5.2771 | 89.6748 | 52.0198 | 131.6085 | 136.187 | | -10.33% | 4.04% | -12.26% | -9.21% | 1.724 | -13.81% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12797 | 0.059651 | 5.2417 | 90.398 | 54.4762 | 132.17 | 136.771 | | -9.60% | 8.95% | -11.89% | -8.82% | 1.659 | -17.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12349 | 0.059651 | 5.0582 | 95.8005 | 59.3223 | 131.3233 | 135.8972 | | -4.20% | 18.64% | -12.45% | -9.40% | 1.615 | -19.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11886 | 0.059651 | 4.8683 | 100.7006 | 69.1698 | 136.042 | 140.7869 | | 0.70% | 38.34% | -9.31% | -6.14% | 1.456 | -27.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.13026 | 0.059651 | 5.3353 | 79.9193 | 34.2625 | 109.8762 | 112.3747 | | -20.08% | -31.48% | -26.75% | -25.08% | 2.333 | 16.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.1296 | 0.059651 | 5.3083 | 80.9213 | 40.313 | 114.673 | 117.2862 | | -19.08% | -19.37% | -23.55% | -21.81% | 2.007 | 0.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12884 | 0.059651 | 5.2771 | 82.9036 | 42.2149 | 116.1864 | 118.8347 | | -17.10% | -15.57% | -22.54% | -20.78% | 1.964 | -1.81% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12797 | 0.059651 | 5.2417 | 83.3661 | 44.5868 | 116.6954 | 119.357 | | -16.63% | -10.83% | -22.20% | -20.43% | 1.870 | -6.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12349 | 0.059651 | 5.0582 | 88.2254 | 48.9198 | 115.9972 | 118.6444 | | -11.77% | -2.16% | -22.67% | -20.90% | 1.803 | -9.83% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11886 | 0.059651 | 4.8683 | 92.125 | 58.2641 | 120.2222 | 122.9696 | | -7.88% | 16.53% | -19.85% | -18.02% | 1.581 | -20.94% |

Table B.94.$^{123}$I β-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_h0 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 100 | 20 | 120 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12823 | 0.059836 | 5.2523 | 85.9954 | 14.4855 | 93.5976 | 96.7605 | | -14.00% | -27.57% | -22.00% | -19.37% | 5.937 | 18.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12758 | 0.059836 | 5.2257 | 87.1035 | 19.8078 | 97.5028 | 100.8227 | | -12.90% | -0.96% | -18.75% | -15.98% | 4.397 | -12.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12683 | 0.059836 | 5.195 | 89.0507 | 21.6209 | 98.5421 | 101.9031 | | -10.95% | 8.10% | -17.88% | -15.08% | 4.119 | -17.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12598 | 0.059836 | 5.1602 | 89.7996 | 23.6477 | 98.7457 | 102.1212 | | -10.20% | 18.24% | -17.71% | -14.90% | 3.797 | -24.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12157 | 0.059836 | 4.9795 | 95.2313 | 27.8727 | 97.445 | 100.7865 | | -4.77% | 39.36% | -18.80% | -16.01% | 3.417 | -31.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11701 | 0.059836 | 4.7926 | 100.1157 | 37.4978 | 102.2005 | 105.7275 | | 0.12% | 87.49% | -14.83% | -11.89% | 2.670 | -46.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12823 | 0.059836 | 5.2523 | 83.0055 | 5.6936 | 82.5859 | 84.4141 | | -16.99% | -71.53% | -31.18% | -29.65% | 14.579 | 191.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12758 | 0.059836 | 5.2257 | 83.5596 | 10.834 | 86.0502 | 87.9698 | | -16.44% | -45.83% | -28.29% | -26.69% | 7.713 | 54.25% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12683 | 0.059836 | 5.195 | 85.301 | 12.4267 | 86.9746 | 88.9181 | | -14.70% | -37.87% | -27.52% | -25.90% | 6.864 | 37.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12598 | 0.059836 | 5.1602 | 85.8316 | 14.3725 | 87.1689 | 89.1211 | | -14.17% | -28.14% | -27.36% | -25.73% | 5.972 | 19.44% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.12157 | 0.059836 | 4.9795 | 90.7805 | 18.0856 | 86.0673 | 88.0009 | | -9.22% | -9.57% | -28.28% | -26.67% | 5.019 | 0.39% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.11701 | 0.059836 | 4.7926 | 94.6868 | 27.2069 | 90.3262 | 92.3685 | | -5.31% | 36.03% | -24.73% | -23.03% | 3.480 | -30.40% |

Table B.95.$^{123}$I FP-CIT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:130-142 keV,142-175 keV,000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi0 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 40 | 80 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028787 | 0.013703 | 1.1791 | 35.2466 | 35.1511 | 69.5525 | 71.9833 | | -11.88% | -12.12% | -13.06% | -10.02% | 1.003 | 0.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028641 | 0.013703 | 1.1731 | 36.766 | 37.4866 | 72.7867 | 75.3305 | | -8.09% | -6.28% | -9.02% | -5.84% | 0.981 | -1.92% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028473 | 0.013703 | 1.1663 | 37.706 | 38.194 | 73.6522 | 76.2262 | | -5.73% | -4.51% | -7.93% | -4.72% | 0.987 | -1.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028282 | 0.013703 | 1.1584 | 37.8873 | 39.0837 | 74.0484 | 76.6363 | | -5.28% | -2.29% | -7.44% | -4.20% | 0.969 | -3.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027292 | 0.013703 | 1.1179 | 39.3138 | 40.4165 | 73.9711 | 76.5562 | | -1.72% | 1.04% | -7.54% | -4.30% | 0.973 | -2.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026267 | 0.013703 | 1.0759 | 40.3976 | 42.8773 | 75.0009 | 77.6219 | | 0.99% | 7.19% | -6.25% | -2.97% | 0.942 | -5.78% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028787 | 0.013703 | 1.1791 | 31.1258 | 31.0201 | 61.3986 | 62.8045 | | -22.19% | -22.45% | -23.25% | -21.49% | 1.003 | 0.34% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028641 | 0.013703 | 1.1731 | 32.3872 | 33.1697 | 64.2597 | 65.7312 | | -19.03% | -17.08% | -19.68% | -17.84% | 0.976 | -2.36% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028473 | 0.013703 | 1.1663 | 33.2449 | 33.7721 | 65.0262 | 66.5153 | | -16.89% | -15.57% | -18.72% | -16.86% | 0.984 | -1.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028282 | 0.013703 | 1.1584 | 33.3348 | 34.6351 | 65.3792 | 66.8763 | | -16.66% | -13.41% | -18.28% | -16.40% | 0.962 | -3.75% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027292 | 0.013703 | 1.1179 | 34.614 | 35.8298 | 65.3234 | 66.8192 | | -13.47% | -10.43% | -18.35% | -16.48% | 0.966 | -3.39% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026267 | 0.013703 | 1.0759 | 35.4496 | 38.1801 | 66.2471 | 67.764 | | -11.38% | -4.55% | -17.19% | -15.30% | 0.928 | -7.15% |

Table B.96.$^{123}$I FP-CIT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:130-142 keV,142-175 keV,000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi0 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 20 | 60 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028307 | 0.013741 | 1.1594 | 35.1587 | 17.3156 | 51.4777 | 53.2632 | | -12.10% | -13.42% | -14.20% | -11.23% | 2.030 | 1.52% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028163 | 0.013741 | 1.1536 | 36.2835 | 19.2048 | 53.8565 | 55.7272 | | -9.29% | -3.98% | -10.24% | -7.12% | 1.889 | -5.54% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027998 | 0.013741 | 1.1468 | 37.04 | 19.7969 | 54.4909 | 56.3839 | | -7.40% | -1.02% | -9.18% | -6.03% | 1.871 | -6.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02781 | 0.013741 | 1.1391 | 37.2214 | 20.525 | 54.7582 | 56.6616 | | -6.95% | 2.62% | -8.74% | -5.56% | 1.813 | -9.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026837 | 0.013741 | 1.0992 | 38.63 | 21.713 | 54.6824 | 56.584 | | -3.42% | 8.57% | -8.86% | -5.69% | 1.779 | -11.04% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025829 | 0.013741 | 1.058 | 39.7306 | 24.0833 | 55.729 | 57.6695 | | -0.67% | 20.42% | -7.12% | -3.88% | 1.650 | -17.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028307 | 0.013741 | 1.1594 | 32.8072 | 13.5158 | 45.4384 | 46.471 | | -17.98% | -32.42% | -24.27% | -22.55% | 2.427 | 21.37% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028163 | 0.013741 | 1.1536 | 33.7239 | 15.2662 | 47.5433 | 48.6252 | | -15.69% | -23.67% | -20.76% | -18.96% | 2.209 | 10.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027998 | 0.013741 | 1.1468 | 34.4118 | 15.7736 | 48.1054 | 49.2003 | | -13.97% | -21.13% | -19.82% | -18.00% | 2.182 | 9.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.02781 | 0.013741 | 1.1391 | 34.5173 | 16.4779 | 48.3447 | 49.4458 | | -13.71% | -17.61% | -19.43% | -17.59% | 2.095 | 4.74% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026837 | 0.013741 | 1.0992 | 35.7931 | 17.5306 | 48.2901 | 49.3904 | | -10.52% | -12.35% | -19.52% | -17.68% | 2.042 | 2.09% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025829 | 0.013741 | 1.058 | 36.6537 | 19.7888 | 49.2288 | 50.3519 | | -8.37% | -1.06% | -17.95% | -16.08% | 1.852 | -7.39% |

Table B.97.$^{123}$I FP-CIT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:130-142 keV,142-175 keV,000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 40 | 8 | 48 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027978 | 0.013821 | 1.146 | 35.113 | 6.6211 | 40.1723 | 41.5335 | | -12.22% | -17.24% | -16.31% | -13.47% | 5.303 | 6.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027836 | 0.013821 | 1.1402 | 36.0022 | 8.2453 | 42.0432 | 43.4749 | | -9.99% | 3.07% | -12.41% | -9.43% | 4.366 | -12.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027673 | 0.013821 | 1.1335 | 36.6534 | 8.7686 | 42.5333 | 43.9833 | | -8.37% | 9.61% | -11.39% | -8.37% | 4.180 | -16.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027487 | 0.013821 | 1.1259 | 36.8432 | 9.3988 | 42.7281 | 44.1874 | | -7.89% | 17.49% | -10.98% | -7.94% | 3.920 | -21.60% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026525 | 0.013821 | 1.0864 | 38.2688 | 10.5005 | 42.6309 | 44.09 | | -4.33% | 31.26% | -11.19% | -8.15% | 3.644 | -27.11% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025529 | 0.013821 | 1.0457 | 39.4029 | 12.8258 | 43.6899 | 45.1921 | | -1.49% | 60.32% | -8.98% | -5.85% | 3.072 | -38.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027978 | 0.013821 | 1.146 | 33.8222 | 3.0192 | 35.4494 | 36.2363 | | -15.44% | -62.26% | -26.15% | -24.51% | 11.202 | 124.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027836 | 0.013821 | 1.1402 | 34.5332 | 4.5325 | 37.106 | 37.9338 | | -13.67% | -43.34% | -22.70% | -20.97% | 7.619 | 261.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027673 | 0.013821 | 1.1335 | 35.1239 | 4.9828 | 37.5408 | 38.3793 | | -12.19% | -37.72% | -21.79% | -20.04% | 7.049 | 204.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027487 | 0.013821 | 1.1259 | 35.247 | 5.5904 | 37.7166 | 38.5605 | | -11.88% | -30.12% | -21.42% | -19.67% | 6.305 | 130.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026525 | 0.013821 | 1.0864 | 36.5483 | 6.5554 | 37.6441 | 38.4882 | | -8.63% | -18.06% | -21.57% | -19.82% | 5.575 | 11.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025529 | 0.013821 | 1.0457 | 37.4465 | 8.765 | 38.5944 | 39.4638 | | -6.38% | 9.56% | -19.60% | -17.78% | 4.272 | -14.55% |

Table B.98.$^{123}$I IBZM 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 84 | 168 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028854 | 0.013172 | 1.1818 | 75.1144 | 74.9078 | 149.0658 | 154.2754 | | -10.58% | -10.82% | -11.27% | -8.17% | 1.003 | 0.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028707 | 0.013172 | 1.1759 | 78.912 | 79.0864 | 156.2332 | 161.6934 | | -6.06% | -5.85% | -7.00% | -3.75% | 0.998 | -0.22% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028539 | 0.013172 | 1.169 | 80.6221 | 80.3008 | 158.1358 | 163.6625 | | -4.02% | -4.40% | -5.87% | -2.58% | 1.004 | 0.40% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028348 | 0.013172 | 1.1611 | 80.9015 | 81.7549 | 158.9479 | 164.5029 | | -3.69% | -2.67% | -5.39% | -2.08% | 0.990 | -1.04% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027355 | 0.013172 | 1.1205 | 82.6346 | 83.6633 | 159.52 | 165.0951 | | -1.63% | -0.40% | -5.05% | -1.73% | 0.988 | -1.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026328 | 0.013172 | 1.0784 | 83.5664 | 86.5535 | 160.5855 | 166.1976 | | -0.52% | 3.04% | -4.41% | -1.07% | 0.965 | -3.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028854 | 0.013172 | 1.1818 | 66.3322 | 66.107 | 131.594 | 134.6074 | | -21.03% | -21.30% | -21.67% | -19.88% | 1.003 | 0.34% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028707 | 0.013172 | 1.1759 | 69.6528 | 69.8433 | 137.9344 | 141.093 | | -17.08% | -16.85% | -17.90% | -16.02% | 0.997 | -0.27% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028539 | 0.013172 | 1.169 | 71.221 | 70.8674 | 139.6199 | 142.8171 | | -15.21% | -15.63% | -16.89% | -14.99% | 1.005 | 0.50% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028348 | 0.013172 | 1.1611 | 71.3513 | 72.2768 | 140.3412 | 143.5549 | | -15.06% | -13.96% | -16.46% | -14.55% | 0.987 | -1.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027355 | 0.013172 | 1.1205 | 72.8761 | 74.0136 | 140.8635 | 144.0892 | | -13.24% | -11.89% | -16.15% | -14.23% | 0.985 | -1.54% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026328 | 0.013172 | 1.0784 | 73.519 | 76.8057 | 141.8205 | 145.068 | | -12.48% | -8.56% | -15.58% | -13.65% | 0.957 | -4.28% |

Table B.99.$^{123}$I IBZM 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 130-142 keV, 142-175 keV, 000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 42 | 126 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028053 | 0.012927 | 1.1491 | 74.8946 | 37.3293 | 110.976 | 114.8261 | | -10.84% | -11.12% | -11.92% | -8.87% | 2.006 | 0.32% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027911 | 0.012927 | 1.1432 | 77.8523 | 40.5558 | 116.4443 | 120.4876 | | -7.32% | -3.44% | -7.58% | -4.37% | 1.920 | -4.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027748 | 0.012927 | 1.1365 | 79.1628 | 41.516 | 117.8418 | 121.9341 | | -5.76% | -1.15% | -6.47% | -3.23% | 1.907 | -4.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027561 | 0.012927 | 1.1289 | 79.4277 | 42.6178 | 118.4214 | 122.5356 | | -5.44% | 1.47% | -6.01% | -2.75% | 1.864 | -6.81% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026596 | 0.012927 | 1.0894 | 81.0885 | 44.1304 | 118.8429 | 122.9731 | | -3.47% | 5.07% | -5.68% | -2.40% | 1.837 | -8.13% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025598 | 0.012927 | 1.0485 | 82.022 | 46.713 | 119.795 | 123.9617 | | -2.35% | 11.22% | -4.92% | -1.62% | 1.756 | -12.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.028053 | 0.012927 | 1.1491 | 69.8407 | 29.2296 | 97.9601 | 100.1868 | | -16.86% | -30.41% | -22.25% | -20.49% | 2.389 | 19.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027911 | 0.012927 | 1.1432 | 72.4273 | 32.1144 | 102.7981 | 105.1368 | | -13.78% | -23.54% | -18.41% | -16.56% | 2.255 | 12.76% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027748 | 0.012927 | 1.1365 | 73.6268 | 32.9278 | 104.0366 | 106.4038 | | -12.35% | -21.60% | -17.43% | -15.55% | 2.236 | 11.80% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027561 | 0.012927 | 1.1289 | 73.7769 | 33.9924 | 104.5523 | 106.9322 | | -12.17% | -19.07% | -17.02% | -15.13% | 2.170 | 8.52% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026596 | 0.012927 | 1.0894 | 75.2688 | 35.3433 | 104.9405 | 107.3301 | | -10.39% | -15.85% | -16.71% | -14.82% | 2.130 | 6.48% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025598 | 0.012927 | 1.0485 | 75.9424 | 37.8294 | 105.7964 | 108.2075 | | -9.59% | -9.93% | -16.03% | -14.12% | 2.007 | 0.37% |

Table B.100.$^{123}$I IBZM 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data;Energy Windows Used:130-142 keV,142-175 keV,000-000 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW_lo13_hi6 | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 84 | 16.8 | 100.8 | | | | | 130-142 | | | |
| Atten Coeff | 0.1481 | | | | | | | | | 142-175 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027427 | 0.013008 | 1.1234 | 74.787 | 14.8068 | 87.3836 | 90.3482 | | -10.97% | -11.86% | -13.31% | -10.37% | 5.051 | 1.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027288 | 0.013008 | 1.1177 | 77.2477 | 17.4704 | 91.7956 | 94.9206 | | -8.04% | 3.99% | -8.93% | -5.83% | 4.422 | -11.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027128 | 0.013008 | 1.1111 | 78.328 | 18.286 | 92.8476 | 96.011 | | -6.75% | 8.85% | -7.89% | -4.75% | 4.283 | -14.33% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026946 | 0.013008 | 1.1037 | 78.5962 | 19.185 | 93.2859 | 96.468 | | -6.43% | 14.20% | -7.45% | -4.30% | 4.097 | -18.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026002 | 0.013008 | 1.065 | 80.2464 | 20.5162 | 93.6339 | 96.8322 | | -4.47% | 22.12% | -7.11% | -3.94% | 3.911 | -21.77% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1481 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025026 | 0.013008 | 1.0251 | 81.2167 | 22.9481 | 94.5742 | 97.8136 | | -3.31% | 36.60% | -6.18% | -2.96% | 3.539 | -29.22% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027427 | 0.013008 | 1.1234 | 71.9673 | 7.1248 | 77.1152 | 78.8291 | | -14.32% | -57.59% | -23.50% | -21.80% | 10.101 | 102.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027288 | 0.013008 | 1.1177 | 74.1197 | 9.5062 | 81.02 | 82.8269 | | -11.76% | -43.42% | -19.62% | -17.83% | 7.797 | 55.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.027128 | 0.013008 | 1.1111 | 75.1063 | 10.2004 | 81.9533 | 83.7825 | | -10.59% | -39.28% | -18.70% | -16.88% | 7.363 | 47.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026946 | 0.013008 | 1.1037 | 75.2791 | 11.0655 | 82.3445 | 84.1847 | | -10.38% | -34.13% | -18.31% | -16.48% | 6.803 | 36.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.026002 | 0.013008 | 1.065 | 76.7785 | 12.237 | 82.6679 | 84.5178 | | -8.60% | -27.16% | -17.99% | -16.15% | 6.274 | 25.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.025026 | 0.013008 | 1.0251 | 77.5032 | 14.5693 | 83.5138 | 85.3879 | | -7.73% | -13.28% | -17.15% | -15.29% | 5.320 | 6.39% |

Table B.101. $^{99m}$I TRODAT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 114-126 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 126.4 | 126.4 | 252.8 | | | | | 114-126 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025554 | 0.004482 | 0.10467 | 128.4074 | 128.2244 | 254.9849 | 264.4495 | | 1.59% | 1.44% | 0.86% | 4.61% | 1.001 | 0.14% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025424 | 0.004482 | 0.10414 | 135.6278 | 133.4698 | 266.6251 | 276.5217 | | 7.30% | 5.59% | 5.47% | 9.38% | 1.016 | 1.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025275 | 0.004482 | 0.10353 | 136.5808 | 137.0725 | 270.0693 | 280.0938 | | 8.05% | 8.44% | 6.83% | 10.80% | 0.996 | -0.36% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025106 | 0.004482 | 0.10283 | 136.9464 | 138.9665 | 271.3133 | 281.3839 | | 8.34% | 9.94% | 7.32% | 11.31% | 0.985 | -1.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024227 | 0.004482 | 0.099232 | 138.2019 | 141.1666 | 271.7951 | 281.8836 | | 9.34% | 11.68% | 7.51% | 11.50% | 0.979 | -2.10% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0023317 | 0.004482 | 0.095508 | 139.5987 | 141.7156 | 271.6774 | 281.7616 | | 10.44% | 12.12% | 7.47% | 11.46% | 0.985 | -1.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025554 | 0.004482 | 0.10467 | 111.1646 | 110.9725 | 220.7099 | 225.764 | | -12.05% | -12.21% | -12.69% | -10.69% | 1.002 | 0.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025424 | 0.004482 | 0.10414 | 117.6491 | 115.3054 | 230.8094 | 236.0948 | | -6.92% | -8.78% | -8.70% | -6.61% | 1.020 | 2.03% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025275 | 0.004482 | 0.10353 | 118.1778 | 118.7385 | 233.8053 | 239.1593 | | -6.50% | -6.06% | -7.51% | -5.40% | 0.995 | -0.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025106 | 0.004482 | 0.10283 | 118.3252 | 120.5595 | 234.8903 | 240.2691 | | -6.39% | -4.62% | -7.08% | -4.96% | 0.981 | -1.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024227 | 0.004482 | 0.099232 | 119.3205 | 122.6058 | 235.3219 | 240.7106 | | -5.60% | -3.00% | -6.91% | -4.78% | 0.973 | -2.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0023317 | 0.004482 | 0.095508 | 120.6565 | 123.002 | 235.2288 | 240.6153 | | -4.54% | -2.69% | -6.95% | -4.82% | 0.981 | -1.91% |

Table B.102. $^{99m}$I TRODAT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 114-126 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 126.4 | 63.2 | 189.6 | | | | | 114-126 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0027246 | 0.00404 | 0.1116 | 129.3225 | 63.4475 | 190.5369 | 197.5525 | | 2.31% | 0.39% | 0.49% | 4.19% | 2.038 | 1.91% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0027108 | 0.00404 | 0.11104 | 135.0164 | 67.1632 | 199.3044 | 206.645 | | 6.82% | 6.27% | 5.12% | 8.99% | 2.010 | 0.51% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0026949 | 0.00404 | 0.11038 | 135.384 | 70.3077 | 202.0091 | 209.4559 | | 7.11% | 11.25% | 6.54% | 10.47% | 1.926 | -3.72% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0026768 | 0.00404 | 0.10964 | 135.0345 | 72.4289 | 202.8536 | 210.3364 | | 6.83% | 14.60% | 6.99% | 10.94% | 1.864 | -6.78% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025831 | 0.00404 | 0.1058 | 134.8709 | 75.4878 | 203.1532 | 210.6533 | | 6.70% | 19.44% | 7.15% | 11.10% | 1.787 | -10.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024862 | 0.00404 | 0.10183 | 135.5446 | 76.6416 | 203.1303 | 210.6311 | | 7.23% | 21.27% | 7.14% | 11.09% | 1.769 | -11.57% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0027246 | 0.00404 | 0.1116 | 119.3432 | 47.5157 | 164.9079 | 168.6536 | | -5.58% | -24.82% | -13.02% | -11.05% | 2.512 | 25.58% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0027108 | 0.00404 | 0.11104 | 124.502 | 50.5224 | 172.5152 | 176.4349 | | -1.50% | -20.06% | -9.01% | -6.94% | 2.464 | 23.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0026949 | 0.00404 | 0.11038 | 124.5068 | 53.572 | 174.8693 | 178.8461 | | -1.50% | -15.23% | -7.77% | -5.67% | 2.324 | 16.21% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0026768 | 0.00404 | 0.10964 | 123.9242 | 55.699 | 175.6086 | 179.6048 | | -1.96% | -11.87% | -7.38% | -5.27% | 2.225 | 11.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0025831 | 0.00404 | 0.1058 | 123.4159 | 58.7561 | 175.8812 | 179.8869 | | -2.36% | -7.03% | -7.24% | -5.12% | 2.100 | 5.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0024862 | 0.00404 | 0.10183 | 123.9521 | 59.8447 | 175.869 | 179.8754 | | -1.94% | -5.31% | -7.24% | -5.13% | 2.071 | 3.56% |

Table B.103. $^{99m}$I TRODAT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 114-126 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 126.4 | 25.28 | 151.68 | | | | | 114-126 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0027704 | 0.003759 | 0.11348 | 129.881 | 24.5909 | 150.3077 | 155.7083 | | 2.75% | -2.73% | -0.90% | 2.66% | 5.282 | 5.63% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0027564 | 0.003759 | 0.1129 | 134.6619 | 27.3917 | 157.2514 | 162.9124 | | 6.54% | 8.35% | 3.67% | 7.41% | 4.916 | -1.68% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0027402 | 0.003759 | 0.11224 | 134.6795 | 30.2658 | 159.3976 | 165.1515 | | 6.55% | 19.72% | 5.09% | 8.88% | 4.450 | -11.00% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0027218 | 0.003759 | 0.11149 | 133.9048 | 32.5259 | 159.9616 | 165.7483 | | 5.94% | 28.66% | 5.46% | 9.27% | 4.117 | -17.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0026265 | 0.003759 | 0.10758 | 132.8879 | 36.1301 | 160.0757 | 165.8855 | | 5.13% | 42.92% | 5.54% | 9.37% | 3.678 | -26.44% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.002528 | 0.003759 | 0.10354 | 133.1891 | 37.6457 | 160.1759 | 165.9963 | | 5.37% | 48.91% | 5.60% | 9.44% | 3.538 | -29.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0027704 | 0.003759 | 0.11348 | 124.2585 | 9.4498 | 130.0493 | 132.9315 | | -1.69% | -62.62% | -14.26% | -12.36% | 13.149 | 162.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0027564 | 0.003759 | 0.1129 | 128.6245 | 11.6634 | 136.0755 | 139.0971 | | 1.76% | -53.86% | -10.29% | -8.30% | 11.028 | 120.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0027402 | 0.003759 | 0.11224 | 128.3161 | 14.4868 | 137.9465 | 141.018 | | 1.52% | -42.69% | -9.05% | -7.03% | 8.857 | 77.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0027218 | 0.003759 | 0.11149 | 127.299 | 16.7998 | 138.4444 | 141.5337 | | 0.71% | -33.55% | -8.73% | -6.69% | 7.577 | 51.55% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0026265 | 0.003759 | 0.10758 | 125.8839 | 20.4937 | 138.5589 | 141.6609 | | -0.41% | -18.93% | -8.65% | -6.61% | 6.143 | 22.85% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.002528 | 0.003759 | 0.10354 | 126.0004 | 21.9912 | 138.6554 | 141.7634 | | -0.32% | -13.01% | -8.59% | -6.54% | 5.730 | 14.59% |

Table B.104. $^{99m}$I TRODAT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 121-126 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 126.4 | 126.4 | 252.8 | | | | | 121-126 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0038806 | 0.005219 | 0.15895 | 130.304 | 126.4417 | 254.5439 | 263.992 | | 3.09% | 0.03% | 0.69% | 4.43% | 1.031 | 3.05% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.003861 | 0.005219 | 0.15815 | 136.933 | 132.3449 | 265.8976 | 275.767 | | 8.33% | 4.70% | 5.18% | 9.09% | 1.035 | 3.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0038383 | 0.005219 | 0.15722 | 138.1701 | 135.692 | 269.2438 | 279.2376 | | 9.31% | 7.35% | 6.50% | 10.46% | 1.018 | 1.83% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0038126 | 0.005219 | 0.15616 | 138.6465 | 137.4481 | 270.4815 | 280.5213 | | 9.69% | 8.74% | 6.99% | 10.97% | 1.009 | 0.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0036791 | 0.005219 | 0.1507 | 141.2105 | 138.2072 | 270.2986 | 280.3315 | | 11.72% | 9.34% | 6.92% | 10.89% | 1.022 | 2.17% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.003541 | 0.005219 | 0.14504 | 142.7504 | 138.8364 | 270.611 | 280.6555 | | 12.94% | 9.84% | 7.05% | 11.02% | 1.028 | 2.82% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0038806 | 0.005219 | 0.15895 | 113.2263 | 109.0094 | 220.3273 | 225.3726 | | -10.42% | -13.76% | -12.85% | -10.85% | 1.039 | 3.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.003861 | 0.005219 | 0.15815 | 119.0592 | 114.0513 | 230.1767 | 235.4475 | | -5.81% | -9.77% | -8.95% | -6.86% | 1.044 | 4.39% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0038383 | 0.005219 | 0.15722 | 119.8918 | 117.2043 | 233.0862 | 238.4237 | | -5.15% | -7.28% | -7.80% | -5.69% | 1.023 | 2.29% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0038126 | 0.005219 | 0.15616 | 120.1651 | 118.877 | 234.1653 | 239.5275 | | -4.93% | -5.95% | -7.37% | -5.25% | 1.011 | 1.08% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0036791 | 0.005219 | 0.1507 | 122.6165 | 119.3543 | 234.0218 | 239.3807 | | -2.99% | -5.57% | -7.43% | -5.31% | 1.027 | 2.73% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.003541 | 0.005219 | 0.14504 | 124.0822 | 119.8124 | 234.3047 | 239.6701 | | -1.83% | -5.21% | -7.32% | -5.19% | 1.036 | 3.56% |

Table B.105. $^{99m}$I TRODAT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 121-126 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 126.4 | 63.2 | 189.6 | | | | | 121-126 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040901 | 0.004672 | 0.16753 | 130.4417 | 62.2612 | 189.9669 | 196.9573 | | 3.20% | -1.49% | 0.19% | 3.88% | 2.095 | 4.75% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040694 | 0.004672 | 0.16668 | 135.7624 | 66.4266 | 198.4909 | 205.7989 | | 7.41% | 5.11% | 4.69% | 8.54% | 2.044 | 2.19% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040455 | 0.004672 | 0.1657 | 136.3428 | 69.3452 | 200.9858 | 208.3917 | | 7.87% | 9.72% | 6.01% | 9.91% | 1.966 | -1.69% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040184 | 0.004672 | 0.16459 | 136.0965 | 71.2773 | 201.8395 | 209.2814 | | 7.67% | 12.78% | 6.46% | 10.38% | 1.909 | -4.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0038777 | 0.004672 | 0.15883 | 137.0446 | 72.9019 | 201.6484 | 209.0858 | | 8.42% | 15.35% | 6.35% | 10.28% | 1.880 | -6.01% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037321 | 0.004672 | 0.15287 | 137.9057 | 73.8562 | 201.8773 | 209.3243 | | 9.10% | 16.86% | 6.48% | 10.40% | 1.867 | -6.64% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040901 | 0.004672 | 0.16753 | 120.5746 | 46.2259 | 164.412 | 168.1443 | | -4.61% | -26.86% | -13.28% | -11.32% | 2.608 | 30.42% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040694 | 0.004672 | 0.16668 | 125.3177 | 49.7141 | 171.8069 | 175.7092 | | -0.86% | -21.34% | -9.38% | -7.33% | 2.521 | 26.04% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040455 | 0.004672 | 0.1657 | 125.5546 | 52.5197 | 173.978 | 177.9328 | | -0.67% | -16.90% | -8.24% | -6.15% | 2.391 | 19.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040184 | 0.004672 | 0.16459 | 125.0962 | 54.4491 | 174.7258 | 178.7 | | -1.03% | -13.85% | -7.85% | -5.75% | 2.297 | 14.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0038777 | 0.004672 | 0.15883 | 125.8457 | 55.9668 | 174.5716 | 178.5437 | | -0.44% | -11.44% | -7.93% | -5.83% | 2.249 | 12.43% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037321 | 0.004672 | 0.15287 | 126.5885 | 56.8337 | 174.7793 | 178.7567 | | 0.15% | -10.07% | -7.82% | -5.72% | 2.227 | 11.37% |

Table B.106. $^{99m}$I TRODAT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 121-126 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 126.4 | 25.28 | 151.68 | | | | | 121-126 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040325 | 0.004355 | 0.16517 | 130.5555 | 23.7838 | 149.6434 | 155.0147 | | 3.29% | -5.92% | -1.34% | 2.20% | 5.489 | 9.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.004012 | 0.004355 | 0.16433 | 135.0993 | 26.9175 | 156.4601 | 162.0895 | | 6.88% | 6.48% | 3.15% | 6.86% | 5.019 | 0.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0039885 | 0.004355 | 0.16337 | 135.2961 | 29.5898 | 158.4804 | 164.1969 | | 7.04% | 17.05% | 4.48% | 8.25% | 4.572 | -8.55% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0039617 | 0.004355 | 0.16227 | 134.6318 | 31.639 | 159.0984 | 164.8487 | | 6.51% | 25.15% | 4.89% | 8.68% | 4.255 | -14.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | Ratio | Ratio %err |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.003823 | 0.004355 | 0.15659 | 134.688 | 33.8324 | 158.8393 | 164.5916 | | 6.56% | 33.83% | 4.72% | 8.51% | 3.981 | -20.38% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0036795 | 0.004355 | 0.15071 | 135.201 | 35.0584 | 159.0909 | 164.8581 | | 6.96% | 38.68% | 4.89% | 8.69% | 3.856 | -22.87% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040325 | 0.004355 | 0.16517 | 125.0106 | 8.5826 | 129.4716 | 132.338 | | -1.10% | -66.05% | -14.64% | -12.75% | 14.566 | 191.31% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.004012 | 0.004355 | 0.16433 | 129.1071 | 11.1482 | 135.3873 | 138.3919 | | 2.14% | -55.90% | -10.74% | -8.76% | 11.581 | 131.62% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0039885 | 0.004355 | 0.16337 | 128.9955 | 13.7549 | 137.1482 | 140.1996 | | 2.05% | -45.59% | -9.58% | -7.57% | 9.378 | 87.56% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0039617 | 0.004355 | 0.16227 | 128.112 | 15.8484 | 137.6935 | 140.7632 | | 1.35% | -37.31% | -9.22% | -7.20% | 8.084 | 61.67% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.003823 | 0.004355 | 0.15659 | 127.9117 | 18.031 | 137.4798 | 140.5508 | | 1.20% | -28.67% | -9.36% | -7.34% | 7.094 | 41.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0036795 | 0.004355 | 0.15071 | 128.2718 | 19.2125 | 137.7077 | 140.7869 | | 1.48% | -24.00% | -9.21% | -7.18% | 6.676 | 33.53% |

Table B.107. $^{99m}$I TRODAT 1:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 123-128 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 126.4 | 126.4 | 252.8 | | | | | 123-128 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0055911 | 0.005665 | 0.22901 | 127.5656 | 147.0167 | 272.6883 | 282.8065 | | 0.92% | 16.31% | 7.87% | 11.87% | 0.8677 | -13.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0055628 | 0.005665 | 0.22785 | 134.1034 | 154.48 | 285.7694 | 296.3729 | | 6.09% | 22.22% | 13.04% | 17.24% | 0.8681 | -13.19% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0055301 | 0.005665 | 0.22651 | 135.7102 | 158.2825 | 289.9702 | 300.729 | | 7.37% | 25.22% | 14.70% | 18.96% | 0.8574 | -14.26% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.005493 | 0.005665 | 0.22499 | 135.9614 | 160.8757 | 291.7859 | 302.6112 | | 7.56% | 27.28% | 15.42% | 19.70% | 0.8451 | -15.49% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0053007 | 0.005665 | 0.21712 | 138.836 | 164.2017 | 294.7733 | 305.7094 | | 9.84% | 29.91% | 16.60% | 20.93% | 0.8455 | -15.45% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0051017 | 0.005665 | 0.20897 | 142.0657 | 164.2348 | 295.7007 | 306.6726 | | 12.39% | 29.93% | 16.97% | 21.31% | 0.865 | -13.50% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0055911 | 0.005665 | 0.22901 | 108.2197 | 129.461 | 236.0383 | 241.4415 | | -14.38% | 2.42% | -6.63% | -4.49% | 0.8359 | -16.41% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0055628 | 0.005665 | 0.22785 | 113.7918 | 136.0392 | 247.3895 | 253.0526 | | -9.97% | 7.63% | -2.14% | 0.10% | 0.8365 | -16.35% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0055301 | 0.005665 | 0.22651 | 114.9406 | 139.5939 | 251.0427 | 256.789 | | -9.07% | 10.44% | -0.70% | 1.58% | 0.8234 | -17.66% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.005493 | 0.005665 | 0.22499 | 114.8956 | 142.1169 | 252.6239 | 258.4059 | | -9.10% | 12.43% | -0.07% | 2.22% | 0.8085 | -19.15% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0053007 | 0.005665 | 0.21712 | 117.3608 | 145.0922 | 255.2442 | 261.0863 | | -7.15% | 14.79% | 0.97% | 3.28% | 0.8089 | -19.11% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0051017 | 0.005665 | 0.20897 | 120.5665 | 144.7751 | 256.0668 | 261.9285 | | -4.62% | 14.54% | 1.29% | 3.61% | 0.8328 | -16.72% |

Table B.108. $^{99m}$I TRODAT 2:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 123-128 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 126.4 | 63.2 | 189.6 | | | | | 123-128 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0047866 | 0.004863 | 0.19606 | 128.1156 | 70.3272 | 195.9827 | 203.2149 | | 1.36% | 11.28% | 3.37% | 7.18% | 1.822 | -8.91% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0047624 | 0.004863 | 0.19507 | 132.8049 | 75.5576 | 205.1196 | 212.6939 | | 5.07% | 19.55% | 8.19% | 12.18% | 1.758 | -12.12% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0047344 | 0.004863 | 0.19392 | 133.6368 | 78.4115 | 207.8665 | 215.5464 | | 5.73% | 24.07% | 9.63% | 13.68% | 1.704 | -14.78% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0047027 | 0.004863 | 0.19262 | 133.2597 | 80.6731 | 208.9 | 216.6221 | | 5.43% | 27.65% | 10.18% | 14.25% | 1.652 | -17.41% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.004538 | 0.004863 | 0.18588 | 134.3442 | 83.4811 | 210.2042 | 217.978 | | 6.28% | 32.09% | 10.87% | 14.97% | 1.609 | -19.54% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0043677 | 0.004863 | 0.1789 | 136.1225 | 83.9035 | 210.6595 | 218.4494 | | 7.69% | 32.76% | 11.11% | 15.22% | 1.622 | -18.88% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0047866 | 0.004863 | 0.19606 | 117.381 | 54.3921 | 169.6299 | 173.4916 | | -7.14% | -13.94% | -10.53% | -8.50% | 2.158 | 7.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0047624 | 0.004863 | 0.19507 | 121.3897 | 58.992 | 177.5594 | 181.6043 | | -3.96% | -6.66% | -6.35% | -4.22% | 2.058 | 2.89% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0047344 | 0.004863 | 0.19392 | 121.8835 | 61.7034 | 179.9494 | 184.0509 | | -3.57% | -2.37% | -5.09% | -2.93% | 1.975 | -1.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0047027 | 0.004863 | 0.19262 | 121.258 | 63.972 | 180.8521 | 184.9763 | | -4.07% | 1.22% | -4.61% | -2.44% | 1.895 | -5.23% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.004538 | 0.004863 | 0.18588 | 122.0024 | 66.6458 | 182.0005 | 186.1528 | | -3.48% | 5.45% | -4.01% | -1.82% | 1.831 | -8.47% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0043677 | 0.004863 | 0.1789 | 123.7105 | 66.8886 | 182.4076 | 186.5688 | | -2.13% | 5.84% | -3.79% | -1.60% | 1.850 | -7.52% |

Table B.109. $^{99m}$I TRODAT 5:1 Activity Uptake Ratio, Scatter-Corrected Emission and Camera Sensitivity Data; Energy Windows Used: 123-128 keV, 126-154 keV

| Data Type | whole | | LStr (microCi) | RStr (microCi) | Sum (microCi) | | | | | TEW | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| SC-Total | | | 126.4 | 25.28 | 151.68 | | | | | 123-128 | | | |
| Atten Coeff | 0.1526 | | | | | | | | | 126-154 | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0041021 | 0.004423 | 0.16802 | 128.4784 | 24.349 | 147.9875 | 153.3051 | | 1.64% | -3.68% | -2.43% | 1.07% | 5.277 | 5.53% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040813 | 0.004423 | 0.16717 | 132.0692 | 28.2506 | 154.6367 | 160.2113 | | 4.49% | 11.75% | 1.95% | 5.62% | 4.675 | -6.50% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040574 | 0.004423 | 0.16619 | 132.4475 | 30.5477 | 156.3478 | 161.9957 | | 4.78% | 20.84% | 3.08% | 6.80% | 4.336 | -13.28% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040302 | 0.004423 | 0.16508 | 131.7135 | 32.62 | 156.8727 | 162.5508 | | 4.20% | 29.03% | 3.42% | 7.17% | 4.038 | -19.24% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0038891 | 0.004423 | 0.1593 | 131.8097 | 35.1771 | 157.1475 | 162.8482 | | 4.28% | 39.15% | 3.60% | 7.36% | 3.747 | -25.06% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.1526 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037431 | 0.004423 | 0.15332 | 132.8006 | 35.8852 | 157.3438 | 163.0542 | | 5.06% | 41.95% | 3.73% | 7.50% | 3.701 | -25.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 13 13 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0041021 | 0.004423 | 0.16802 | 122.9063 | 9.3815 | 128.0455 | 130.8834 | | -2.76% | -62.89% | -15.58% | -13.71% | 13.101 | 162.02% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 15 15 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040813 | 0.004423 | 0.16717 | 125.9862 | 12.8041 | 133.8183 | 136.7939 | | -0.33% | -49.35% | -11.78% | -9.81% | 9.840 | 96.79% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 17 17 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040574 | 0.004423 | 0.16619 | 126.097 | 15.0202 | 135.3097 | 138.3246 | | -0.24% | -40.58% | -10.79% | -8.80% | 8.395 | 67.90% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 19 19 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0040302 | 0.004423 | 0.16508 | 125.1416 | 17.1438 | 135.7725 | 138.8038 | | -1.00% | -32.18% | -10.49% | -8.49% | 7.300 | 45.99% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 26 26 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0038891 | 0.004423 | 0.1593 | 124.935 | 19.6837 | 136.0242 | 139.0679 | | -1.16% | -22.14% | -10.32% | -8.31% | 6.347 | 26.94% |
| | | | | | | | | | | | | | |
| Atten Coeff | 0.12 | | | | | | | | | | | | |
| Striata ROI Size | 32 32 | | | | | | | | | | | | |
| Bkgd ROI Size | 13 13 | | | | | | | | | | | | |
| Units: | microCi | | | | | | | | | | | | |
| Ave bkgd Act | bkgd STD | bkgd Act per Area | LStr Act | RStr Act | Sum w/ Cor | Sum w/o Cor | | LStr %err | RStr %err | Sum w Corr %err | Sum w/o Corr %err | Ratio | Ratio %err |
| 0.0037431 | 0.004423 | 0.15332 | 125.8248 | 20.3021 | 136.2041 | 139.2533 | | -0.46% | -19.69% | -10.20% | -8.19% | 6.198 | 23.95% |

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